HIV INTEGRATED BEHAVIORAL AND BIOLOGICAL SURVEILLANCE SURVEYS-KOSOVO, 2014

People who Inject Drugs in Prishtina and Prizren
Men who have Sex with Men in Prishtina

With the financial support of

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To Fight AIDS, Tuberculosis and Malaria

Members of the HIV Integrated Behavioral and Biological Surveillance (IBBS) Survey Reference Group

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ABBREVIATIONS/ACRONYMS

CSGD	Centre for Social Group Development
FSW	Female Sex Worker
GFATM	Global Fund to fight AIDS, TB and Malaria
HIV	Human Immunodeficiency Virus
IBBS	Integrated behavioral and biological surveillance
NIPH	National Institute of Public Health
MSM	Men who have sex with men
NGO	Non-Governmental Organization
PSE	Population size estimates
PWID	People who inject drugs
RDS	Respondent Driven Sampling
STI	Sexually Transmitted Infection
VCT	Voluntary Counseling and Testing
WHO	World Health Organization
CDF	Community Development Fund

EXECUTIVE SUMMARY

This report presents findings from the third round of the integrated behavioral and biological surveillance (IBBS) surveys among people who inject drugs (PWID) in Prishtina and Prizren, and men who have sex with men (MSM) in Prishtina conducted in July, August and September of 2014. The primary objective of these surveys was to provide information on the prevalence of HIV infection and other sexually transmitted infections and associated risk factors to inform programmatic and policy responses and provide a time point for monitoring epidemic trends.

The third round of the Kosovo HIV IBBS surveys were funded by GFATM through the Community Development Fund (CDF), Prishtina, Kosovo, and implemented by the National Institute of Public Health (NIPH), Prishtina, Kosovo. Funding for the survey and technical support were provided by GFATM through CDF.

The PWID and MSM surveys used respondent-driven sampling (RDS) to obtain samples of 300 PWID in Prishtina, 199 PWID in Prizren and 217 MSM in Prishtina during the period of time July-September 2014. RDS is a chain-referral sampling method specifically designed to obtain probability-based samples of 'hidden' and hard-to-reach populations that are socially networked. After providing informed consent, respondents completed an interview and provided blood specimens to be tested for HIV, HBV, HCV (PWID only) and syphilis. Population estimates and corresponding 95% confidence bounds were adjusted by differential network sizes using the successive sampling estimator[1] in RDS Analyst software (www.hpmrg.org). Graphics of recruitment chains were created using Netdraw in UCINET 6.0 (www.analytictech.com). In addtion this survey used unique object and service multiplier methods and the SS Size method[2] in RDS Analyst to generate population size estimates (PSE) for PWID and MSM.

The findings from these surveys will provide a baseline for monitoring and evaluation, identify gaps in existing programs and help the development of long-term intervention and prevention strategies responsive to the needs of PWID and MSM in Kosovo.

TABLE OF CONTENTS

BACKGROUND

This report presents findings from the third round of the integrated behavioral and biological surveillance (IBBS) surveys among people who inject drugs (PWID) in Prishtina and Prizren, and men who have sex with men (MSM) in Prishtina conducted in July, August and September of 2014. The primary objective of these surveys was to provide information on the prevalence of HIV infection and other sexually transmitted infections (STI) and associated risk factors to inform programmatic and policy responses and provide a time point for monitoring epidemic trends.

The first round of IBBS was conducted between February and July 2006 with financial support from the United States Agency for International Development (USAID) and UNAIDS Programme Acceleration Funds managed by the UN Theme Group (UNTG) on HIV/AIDS in Kosovo. These surveys were conducted using Respondent-driven sampling (RDS) among 200 PWID in Prishtina (n=129) and Prizren (n=71)[i] and 69 MSM in Prishtina.

The second round of IBBS was conducted in 2011 with financial support from the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM). Surveys were conducted among 205 PWID and 204 MSM in Prishtina using RDS.

[i] The Prishtina and Prizren data were pooled violating an essential assumption in RDS. These data should be interpreted with caution.

HIV in Kosovo

Kosovo is estimated to have an HIV prevalence below 0.1%, with only 90 cases of HIV reported as of December 2013. Although HIV is expected to be higher among populations at higher risk of HIV such as PWID and MSM, no HIV infection has been found in either of these groups in the previous two rounds of IBBS conducted in 2006 and 2011 (Table 1). No syphilis infection in 2006 and low syphilis prevalence in 2011 were found in previous rounds of IBBS. High prevalence of hepatitis B (HBV) were found among both groups in the 2006 surveys, but was much lower in the 2011 surveys. Hepatitis C (HCV) prevalence among PWID tripled from 2006 to 2011 and among MSM increase slightly from 0 to 1.0 from 2006 to 2011.

Table 1. HIV, Syphilis, Hepatitis B (HBV) and Hepatitis C (HCV) prevalence among PWID and MSM, 2006 and 2011.

Test	2006		2011	
	PWID^	**MSM**	**PWID**	**MSM**
HIV	0	0	0	0
Syphilis	0	0	2 (0.3, 4.3)	2.4 (0.4, 5.1)
HBV	20.1 (12.2, 29.5)	14.9 (3.8, 28.3)	6 (3.0, 10.5)	2.2 (0.6, 4.5)
HCV	12.5 (8.0 17.7)	0	37.4 (28.9, 46.8)	0.1 (0, 0.4)

^These data are pooled and therefore may not be representative of the population sampled

RATIONALE AND OBJECTIVES

In the summer of 2014, the IBBS survey was conducted among people who inject drugs (PWID) in Prishtina and Prizren and men who have sex with men (MSM) in Prishtina.

Specific Objectives

Specific objectives of the survey were to determine the prevalence of HIV and STI associated risk behaviors and to provide a baseline for monitoring trends in the HIV epidemic in selected key risk populations in selected cities in Kosovo. In addition, the study objectives included:

- Measuring key socio-demographic characteristics.
- Quantifying alcohol and drug use.
- Assessing the use of and access to health and social welfare programs;
- Assessing the knowledge of and attitudes towards HIV/AIDS.
- Evaluating attitudes of stigma and discrimination towards people living with HIV.
- Measuring STI occurrence and treatment seeking behaviors.
- Evaluating knowledge of and access to prevention services.
- Strengthening the research capacities of national teams.
- Developing recommendations to guide programs and expand services and identify means to increase PWID and MSM programs coverage and uptake in Kosovo.
- Estimating the population sizes of the PWID in Prishtina and Prizren and MSM in Prishtina.

Eligibility

All eligible participants were 18 years or older and required to live and/or work in the survey area. In addition: PWID were required to have injected drugs in the past month and MSM were required to have engaged in anal sex with a man in the past year.

METHODS

Formative research

Key informant interviews were conducted during the week of May 26, 2014 in order to identify potential sampling issues related to RDS (e.g., social network sizes, network properties, acceptability of RDS, etc.), resolve study logistics (e.g., amount for incentives, preferred interview site location, hours of operation, openness to HIV testing and results, etc.) and to determine appropriate population size estimation techniques. Information was also gathered to help develop the final behavioral questionnaires. Findings from the formative research activities were incorporated into the design of the survey and the development of the questionnaire.

Key findings from the formative research indicated that PWID could be easily sampled in Prishtina and Prizren and MSM in Prishtina using RDS. Population sizes could be estimated using unique object and service multipliers, the SS size method and 'wisdom of the crowds' enumeration.

Data collection locations

PWID were sampled through a local non-governmental organization (NGO), Labyrinth, based in Prishtina and Prizren. Labyrinth has been providing drug treatment and harm reduction to people who use drugs since 2002. MSM were sampled through the Centre for Social Group Development (CSGD), an NGO providing HIV testing and services to the MSM population in Prishtina since 2002. Both Labyrinth and CSGD were involved in the IBBS of PWID and MSM conducted in 2011. Prishtina is the capital and largest city, as well as the administrative, educational, and cultural center, of Kosovo (population of 205,133 registered inhabitants)[3] (Figure 1). Prizren is located in the south-eastern part of the country and is the second largest city in Kosovo (population of approximately 178,000)[4].

Figure 1. Map of Kosovo identifying Prishtina and Prizren.

Respondent Driven Sampling (RDS) to Recruit PWID and MSM

This survey used RDS to recruit PWID in Prishtina and Prizren and MSM in Prishtina. RDS is a variant of a chain referral sampling method which, when implemented and analysed properly, yields data representative of the populations from which the samples were gathered.[5,6] Recruitment begins with a number of purposefully selected members of the study population referred to as "seeds". After enrolling and completing the steps in the survey, each seed is given a fixed amount (usually no more than three) of uniquely numbered coupons with which to recruit peers (other eligible PWID and MSM) into the survey. These recruited peers who also enrol in and complete the survey steps are considered the first wave of respondents. Each respondent in the first wave who enrols in and completes the survey steps is then provided a fixed number of coupons with which to recruit their peers into the survey. Successive waves of recruitment, ideally resulting in long recruitment chains of respondents, continue until the sample size is reached.

Each respondent is asked his or her social network size which is directly tied to the eligibility criteria and sets up the probability of each recruit's selection into the sample. Self-reported social network sizes are considered the sampling frame which is used to produce weights for deriving estimates. Weights are applied inversely whereby those with larger social network sizes (the ability to recruit more participants and normally overrepresented in a standard snowball sampling method) are provided relatively less weight and those with smaller social network sizes are provided relatively more weight. Furthermore, data are analysed with mathematical modelling of the recruitment process (social network ties of recruits-recruiters) to generate relative inclusion probabilities and to measure the level of recruitment effort and homophily (the non-random recruitment of persons with characteristics similar to the recruit). The recruitment process of who recruited whom is monitored through the unique numbers on each participant's recruitment coupon. The unique coupon numbers also ensure respondents' anonymity by linking each respondent to their questionnaire and biological test results, thereby avoiding the need to collect names, addresses or other personal information.

When all methodological and theoretical requirements are fulfilled, RDS yields estimates of population parameters upon which inferences can be made about characteristics and behaviors of the sampled population.

Recruitment Process RDS

Originally, three seeds were selected for each population sampled. However, based on the recruitment progress and that some seeds did not recruit others or that recruitment chains stopped producing, more seeds were added for all populations. Seeds for PWID and MSM were identified through staff at Labyrinth and CSGD, respectively.

Seeds identified for the study population were each given three uniquely coded coupons which were used in recruiting their peers into the survey. Respondents who presented a

valid recruitment coupon to a survey site were screened for eligibility and provided informed consent for a face-to-face interview, HIV pre-test counseling and a blood extraction for HIV, syphilis, HBV and HCV testing. Interviews were conducted in Albanian by trained interviewers and took approximately 35 minutes to complete. Following the interview, each respondent was provided a set number of coupons (no more than three coupons) to use in recruiting eligible peers.

Respondents received a primary compensation of 10 Euro for transportation costs and a secondary compensation of 5 Euro for each (a maximum of three) recruit who was eligible and consented to participate in and completed the survey. Survey completion consisted of completing the behavioral questionnaire and the biological testing. As explained to them during the consent process, respondents could neither receive their compensation nor recruitment coupons if they decided not to provide a biological specimen. No personal identifying information was collected. To ensure confidentiality, respondents' questionnaires and biological tests were identified using a unique study identification number provided on the recruitment coupons.

Sample Size Calculation

The 2006 PWID IBBS survey sample sizes were N=71 in Prizren and N=129 in Prishtina and in 2011, the PWID IBBS survey sample sizes were N=205 in Prishtina (2011 BBSS was not conducted in Prizren). The sample sizes were increased for the 2014 PWID BBSS surveys to N=300 in Prishtina and N=200 in Prizren. In Prishtina, the 2006 MSM IBBS survey was N=69 in 2006 and N=204 in 2011. The sample sizes for the 2014 MSM BBSS were increased to N=300 in Prishtina.

Table 2. Final sample sizes for 2014 IBBS

Population	City	Sample size
PWID	Prishtina	300
PWID	Prizren	200
MSM	Prishtina	300

Tools development

The IBBS protocols and final questionnaires were finalized by a team from NIPH, the Survey Reference Group and the NGOs Labyrinth for PWID and CSGD for MSM.[7] The questionnaire collected data on socio-demographic characteristics, sexual and drug risk behaviors, HIV transmission, HIV and STI signs and symptoms, HIV knowledge, perceptions, stigma and discrimination, information on respondents' social network sizes, as well as access to and utilization of HIV related services. The protocol and questionnaires were submitted for ethical review and approval to the Ethical Board of the Ministry of Health, Republic of Kosovo.

Staffing

Staff members for the survey were recruited through the non-governmental organizations Labyrinth (for PWID) and CSGD (for MSM). PWID and MSM staff members were trained for three days about staff roles and responsibilities, seed selection and respondent recruitment, the ethical consent process, coupon and respondents tracking, the compensation process, administration of the behavioral questionnaire, collection of biological samples, biological sample processing and transport and provision of biological test results and referrals.

LABORATORY PROCEDURES

Biological specimen collection, storage, transport and processing

Following the interview and pre-test counseling, the laboratory technician collected a venous blood sample of approximately five millilitres into a Vacutainer. Biological specimens were stored in a refrigerator located at the survey offices until transported to the laboratory of the Department of Microbiology, at the NIPH in Prishtina, Kosovo. At the laboratory, samples were centrifuged and serum stored in minus 20°C until testing was conducted. Testing was anonymous and linked. Samples were tested with ELISA testing kits for the presence of antibodies against HIV1/2, IgM and IgG antibodies against Treponema pallidum and presence of HBsAg and antibodies against HBsAg (antiHBs) and antibodies against HCV (PWID only). Samples which were initially positive on ELISA anti-HIV1/2 were tested with a Western Blot HIV1/2 confirmation test, and similar, samples which were initially positive for anti-HCV were tested by Line Immunoassay confirmation test for the presence of antibodies against HCV.

Results procedures

Tests were processed at the National laboratory in Prishtina once or twice a week in order to provide results as soon as possible. Test results were recorded onto forms and sent to the respective coordinators at each site in closed envelopes.

DATA MANAGEMENT AND ANALYSIS

Data were entered weekly and stored into two Microsoft Excel spread sheets: one to monitor recruitment progress, track coupon numbers and one to store behavioral survey data. Data cleaning and quality control were conducted by the NIPH in Prishtina. Final datasets were merged and underwent consistency checks. Frequencies and cross-tabulations were performed to check validity and logic of all variables in the datasets. Hard copies of completed questionnaires were stored at the NIPH in Prishtina. Data were formatted and coded in Microsoft Excel and SPSS before being transferred into RDS Analyst (www.hpmrg.org). Population estimates and 95% confidence intervals were calculated using the successive sampling estimator[8]. Recruitment graphics for the RDS samples were created using NETDRAW in UCINET (http://www.analytictech.com/ucinet/download.htm).

DATA PRESENTATION

Data for each population are presented in separate sections in tables. For categorical data, the category size (n), adjusted estimates and 95% confidence intervals are provided and for continuous data, the adjusted mean and minimum and maximum values are presented.

POPULATION SIZE ESTIMATION

The population sizes of PWID and MSM in each of the study cities were estimated using four methods: 1) the unique object multiplier[9]; 2) the service multiplier method; 3) the successive sampling size (SS-size) method[10]; and, 4) 'wisdom of the crowds' enumeration.

Multiplier methods

Both multiplier methods involve overlapping independent population counts to extrapolate the overall population size.

Unique object multiplier

The unique object multiplier involves distributing unique objects to population members in each city one week prior to initiating the RDS study. The number of objects distributed are counted (first multiplier) and used in a calculation with the proportion of those who reported receiving the object (second multiplier) to derive a population estimation.

Service multiplier

The service multiplier used service data consisting of the unique counts of population members who received a service in each city during the six months prior to initiating the RDS study. The second multiplier was enumerated during the RDS survey by asking each respondent whether they had exposure to the service at least one time in the same six month period.

Multiplier assumptions

The assumptions for the multiplier are:

- Two overlapping data sources (specific to the group being counted)
- Population being counted must have non-zero probability of inclusion in both sources
- One data source (i.e. the survey) must be random and encompass the group in the multiplier, but can include others as well

- Second data source (multiplier) need not be random but should be specific to the group being estimated
- No individual accounted for more than once in the multiplier
- Two data sources must be independent of each other (inclusion in one not related to inclusion in the other)
- Limited in- and out-migration

Multiplier Calculation

The number of population members who received a unique object one week prior to the start of the survey was used as a numerator (M) and the proportion who reported attending receiving an object prior to the start of the survey was used as the denominator (P). The mathematical formula to calculate the size of the population was:

N= M/P

Where:

N=Estimated Size

P=Proportion of population members in survey who reported receiving the object/service.

M=Number of population members to whom the object was distributed or service provided.

Confidence intervals for the multiplier method

The following formula was used to calculate the 95% confidence bounds around the population size estimates:

$$Var(N) = \frac{Var(M)}{[E(P)]^2} + \frac{[E(M)]^2}{[E(P)]^4} Var(P)$$

$$CI95\%\ for\ N = N \pm 1.96 \times \sqrt{Var(N)}$$

Where:

N=Population size estimates

M=Number of population members who received an object/service.

E(P)=Proportion of population members in the survey who reported receiving an object/service.

E(M)=expected number of population members who could have received an object/service.

Var(M)=As M, number who received an object/service, Var(M) is equal to M.

Var(P)=The variance of the overlap of population members who received the object/service (SE^2) extracted from the RDS Analyst output.

The assumptions for calculating the confidence bounds are:

- N and P are two independent variables (Covariance = 0)
- P has an approximate a normal distribution with the Standard Error equal to SE. The RDS Analyst output for the SE for P comes from the bootstrap percentile method[11] and it might be asymmetric.
- P has a small Coefficient of Variation.

SS Size Estimates

The SS-Size population size estimation method, uses each participants' social network size data gathered during the RDS studies to quantify population sizes by assuming that the network size distribution of successive waves reflects a depletion of the population. The estimates use a Bayesian framework (i.e., quantifies uncertainty about unknown quantities by relating them to known quantities) incorporating information about a "guess" or prior knowledge of the size of the sampled population. The Bayesian framework also allows the computation of probability intervals.

Wisdom of the Crowds

This method uses enumeration based on the estimates of participants in the surveys. Each participant was asked to respond to questions about the most likely highest, lowest and accurate number of population members in the survey respective city. The mean from these responses were calculated to provide population size estimations.

ETHICAL CONSIDERATIONS

Study participation was voluntary and respondents were informed that they were free to withdraw from the study at any time during the survey process. Following careful explanation of the survey, study staff gave eligible respondents the consent form to read or, if necessary, the consent form was read to the respondents by a staff member. All respondents either signed or verbally stated that they understood and agreed to all of the items contained in the consent form before being enrolled in the survey. In order to enrol in the survey, potential participants had to agree to complete the behavioural interview as well as the biological testing. To minimize any discomfort due to the sensitive nature of the questions asked, the questionnaire was administered in a private and confidential setting. Respondents could refuse to answer any specific question. All respondents were provided the name and telephone number of the local survey coordinator should they have any questions about the survey or if they believed they had been injured or mistreated as the result of their involvement in the survey.

All survey data, including biological and behavioral information, were confidential. The survey team did not record names, addresses or other personal identifiers on the questionnaires or on any of the laboratory specimens and results. Coupon identification numbers were assigned to each respondent and used to link questionnaire responses to management forms and laboratory test results. After data collection, questionnaires, forms and test results were kept in a secure location in the interview offices in the survey location before being transferred to the NIPH in Prishtina.

LIMITATIONS

This survey was subject to several limitations. Because behavioral data were self-reported in a face-to-face interview and in an NGO setting, social desirability bias may have resulted in the underreporting of risky behaviors. Given that the surveys were held in an NGO that was known to respondents to provide HIV and other services, social desirably responses, especially questions related to NGO services, may have been more prevalent than if the study were conducted in an objective setting.

Compensation for respondents is a crucial element of recruitment in RDS but it can be challenging to determine the appropriate amount for each population in a given country. If the compensation offered is too high, there is a risk that recruits may fake eligibility requirements. If the amount is too low, recruitment will not be successful. For these surveys, compensation amounts were set based on meetings with key experts during the pre-survey formative research. In order to prevent double-enrolment and ensure that all respondents met the eligibility criteria, recruits attending the survey sites were screened by a trained screener with experience working with the population. Anyone who tried to enrol in the survey and was found to have already participated or to be ineligible, had their coupon taken away by a staff member and were asked to leave the premises.

Although the PWID and MSM estimates presented here may be considered representative of the network of the population from which respondents were recruited, the small number of values for certain variables may limit the ability to derive accurate estimates. In some cases, confidence intervals are too wide for meaningful interpretation. Further, as analysis in RDS Analyst depends on the integrity of recruitment chains to determine and adjust estimates for probability of recruitment, missing values may distort adjusted proportion estimates.

USING THESE DATA TO BUILD KNOWLEDGE

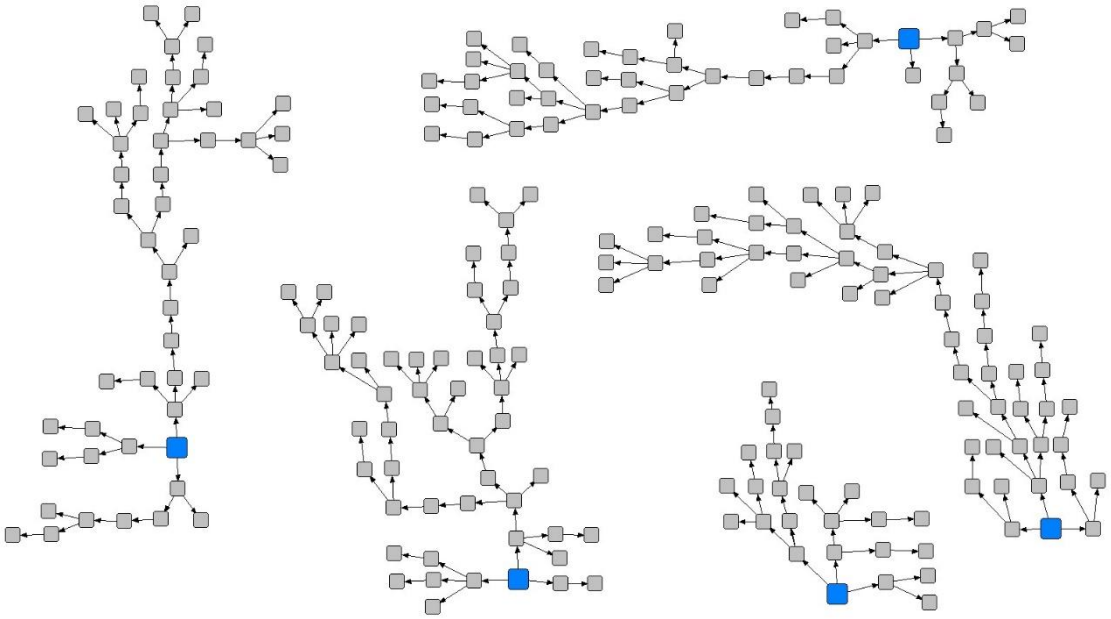
RDS relies on knowling the underlying structure of the social network being sampled and theoretical premiese that cannot always be met. Therefore, it is important to rely on these findings as estimates, rather than fact, and to use the confidence intervals as guidelines for how high or low the estimate may be if these studies were to be repeated numerous times in the same population. For some variables, the confidence intervals are very wide. These estimates with wide confidence intervals should be interpreted with caution. Data from IBBS, using any sampling method should be triangulated with other relevant data from sentinel surveillance, VCT centers, NGOs working with high risk populations, one time studies and mapping and other qualitative exercises to build the most optimal understanding of how HIV is affecting these populaitons. In addition, these data should be used, along with other data, to model epidemic trends in the country.

STUDY FINDINGS MEN WHO HAVE SEX WITH MEN

Overview

Over the course of roughly three months, beginning in July 2014, 217 MSM (including five seeds) were recruited in Prishtina. The maximum number of waves reached in the recruitment chain was 14 (see recruitment graph, figure 2). Seeds are identified in the recruitment graphic as larger blue squares and only have arrow leading away from them rather than towards them.

Figure 2. Recruitment graph of the MSM sample (n=217), with five recruitment chains, Prishtina, Kosovo, 2014.



Socio-demographic characteristics

The largest category of MSM were under the age of 25 years, attended secondary school, and were single (Table 3). Among the 34% who reported being married or 17% who reported being in a steady relationship, almost 70% were living with their spouse or partner. Just over 50% of MSM had some kind of employment but the average monthly income for more than 50% of MSM was <100 Euro. Almost all MSM considered their gender to be male, however 14% considered themselves as either female or transgender. Most MSM self-identified as bisexual.

Table 3. Socio-demographic characteristics of MSM

	N	%	95% CI
Age Groups			
18-24	113	43.7	34.6, 52.7
25-29	44	22.2	14.2, 30.3
30-39	37	19.1	11.6, 26.7
40-49	16	10.5	4.1, 16.9
50+	7	4.4	0.8, 8.06
Age Groups			
≤ 24	113	43.7	34.5, 52.8
≥ 25	104	56.3	47.3, 65.5
Median age (min., max.)age in years		25 (18 – 64)	
Education			
No formal education	29	12.0	6.3, 17.6
Primary	46	23.0	15.2, 30.7
Secondary	105	46.0	37.1, 55.0
College/university	37	19.0	10.1, 27.3
Civil status			
Married	52	33.6	24.2, 43.0
Steady relationship w/man	44	11.0	6.4, 15.5
Steady relationship w/female	14	6.0	1.8, 10.2
Single	106	49.4	40.0, 59.0
Living with spouse or partner (among those who are married/have partner)			
Yes	57	68.8	58.2, 79.6
No	52	31.2	20.4, 41.8
Source of income			
Permanent employment	76	34.6	28.8, 43.3

Temporary/part time jobs	50	21.7	14.3, 29.1
Family support	91	43.7	34.6, 52.8
Average monthly income			
<100 EUR	117	55.1	45.3, 65.0
100-300 EUR	44	24.0	15.1, 32.8
300-400 EUR	54	20.9	13.6, 28.1
Gender			
Male	189	85.8	79.0-92.3
Female	17	7.5	2.2, 12.9
Transgender	11	6.7	1.9, 11.5
Self-reported sexual identity			
Homosexual	80	30.9	22.5, 39.2
Bi-sexual	137	69.1	60.8, 77.5
Other	10	5.3	0.9, 9.8

Mobility in past 12 Months

Just over half of MSM reported traveling outside of Kosovo and almost 90% reported traveling outside of Prishtina (Table 4). While traveling outside of Kosovo, most MSM reported traveling to places in Europe whereas roughly equal percentages reported traveling to Albania, Macedonia or other Balkan areas. Around one quarter of MSM reported having anal sex without a condom while abroad, whereas almost 40% reported do so while traveling outside of Prishtina.

Table 4. Mobility among MSM in past 12 months, Prishtina, 2014

	N	%	95% CI
Travel outside of Kosovo			
Yes	124	55.1	45.6, 64.7
No	93	44.9	35.3, 54.4
Countries visited outside of Kosovo on last trip			
Albania	32	23.8	12.8, 34.9
Macedonia	26	24.4	12.2, 36.4
Ballkans	24	21.8	11.6, 32.1
Europe	42	30.0	18.5, 41.4
Anal sex without condom while abroad			
Yes	30	26.5	15.3, 37.6
No	94	73.5	62.3, 84.7
Travel outside of Prishtina			
Yes	196	89.8	84.1, 95.6

No	20	10.2	4.4, 15.9
Anal sex without condom outside of Prishtina			
Yes	80	38.3	28.7, 47.9
No	117	61.7	52.1, 71.3

General sexual behaviors

The median age of first anal sex with a male partner was 17 years. The majority of MSM reported generally practicing exclusively active anal sex (versus exclusively passive or both) (Table 5). MSM reported having a median of three oral and a median of three anal sex partners in the past 12 months. One quarter of MSM reported engaging in group sex in the past 12 months and three quarters reported using a condom at their last group sex encounter.

Table 5. General sexual behaviors among MSM, Prishtina, 2014

	N*	%	95% CI
Age at first anal sex with male partner Median (min., max)		17 (7 – 40)	
Type of anal sex practiced generally (no time frame)			
Exclusively active/insertive	93	48.0	37.8, 58.4
Exclusively passive/receptive	33	15.8	9.3, 22.4
Both active and passive	91	36.2	26.7, 45.4
Number of oral male sexual partners in past 12 months Median (min., max)		3 (1 - 150)	
Number of male anal sex partners in past 12 months Median (min., max)		3 (1 –150)	
Group sex in past 12 months			
Yes	55	24.7	16.9, 32.4
No	161	75.3	67.6, 83.0
Condom use at last group sex			
Yes	40	73.2	55.6, 90.8
No	14	26.8	92.2, 44.4

Steady male sexual partners

Among the 52% of MSM who reported having a steady partner in the past 12 months, 54% do not know the HIV status of that partner, 39% had sex with another man while being in a steady relationship in the past 12 months, 55% reported using a lubricant and 68% reported using a condom at last anal sex with their steady partner (Table 6). Among the 32% of MSM who did not use a condom, 52% reported that 'they trust each other' and 44% reported that they do not like sex with condoms as being the main reasons for not doing so.

Table 6. Steady male sexual partners among MSM, Prishtina, 2014

	N*	%	95% CI
Had steady sex partner in past 12 months			
Yes	134	51.9	42.1, 61.2
No	82	48.1	38.8, 57.9
Knows HIV status of last steady partner			
No	78	54.1	40.6, 67.6
Yes, he is HIV-negative	57	45.9	32.3, 59.3
Yes, he is HIV-positive	--	--	--
Had anal sex with another man while in steady relationship in past 12 months			
Yes	63	38.6	27.2, 49.8
No	71	61.4	50.2, 72.8
Used lubricant at last anal sex with steady partner			
Yes	77	54.8	43.3, 66.2
No	57	45.2	33.8, 56.7
Used condom at last anal sex with steady partner			
Yes	82	68.4	58.2, 78.7
No	52	31.6	21.3, 41.2
Main reason for not using a condom at last anal sex with steady partner			
Condom not available	3	4.1	0.2, 8.2
Trust each other	26	52.3	30.9, 73.9
Doesn't like sex with condoms	21	43.6	21.4, 65.7

Casual male sexual partners

Among the 82% who reported having anal sex with a casual partner in the past 12 months, 51% reported using lubricant and 76% reported using a condom at last anal sex with their casual partner (Table 7). Among the 24% of MSM who did not use a condom, 53% reported that they do not 'like sex with condoms' as being the main reason for not doing so.

Table 7. Casual male sexual partners among MSM, Prishtina, 2014

	N*	%	95% CI
Had anal sex with casual partner in past 12 months			
Yes	177	81.5	74.6, 88.5
No	38	18.5	11.5, 25.4
Used lubricant at last anal sex with casual partner			
Yes	100	50.8	39.9, 61.5
No	82	49.2	38.5, 60.1
Used condom at last anal sex with casual partner			
Yes	137	75.9	67.4, 84.4
No	43	24.1	15.6, 32.6
Main reason for not using a condom at last anal sex with casual partner			
Condom not available	15	35.4	19.8, 51.0
Trust each other	4	11.8	3.7, 27.3
Doesn't like sex with condoms	23	52.8	35.6, 67.0

Paid male sexual partners (participant paid for sex)

Among the 7% of MSM participants who reported paying a man to have anal sex in the past 12 months, 47% reported using lubricant and 44% reported using a condom at last anal sex with a man they paid for sex (Table 8). Among the 56% of MSM who did not use a condom, half reported that they do not 'like sex with condoms' and half reported that a condom was not available as being the reasons for not doing so.

Table 8. Paid male sexual partners among MSM, Prishtina, 2014

	N*	%	95% CI
Had anal sex with paid partner in past 12 months			
Yes	19	6.9	3.2, 10.6
No	197	93.1	89.4, 96.8
Used lubricant at last anal sex with paid partner			
Yes	11	47.1	28.1, 65.6
No	6	52.9	34.4, 72.2
Used condom at last anal sex with paid partner			
Yes	11	44.0	28.1, 59.7
No	5	56.0	40.2, 71.9
Main reason for not using condom at last anal sex with paid partner			
Condom not available	2	49.8	56.4, 94.0
Doesn't like sex with condoms	3	50.2	60.4, 94.3

Paying male sexual partners (participant received money for sex)

Twenty nine percent of MSM reported being paid by a man to have anal sex in the past 12 months, among which 47% reported using lubricant and 93% reported using a condom at last anal sex with a man that paid them for sex (Table 9). Among the 7% who did not use a condom, most reported that they or their partner do not 'like sex with condoms'.

Table 9. Paying male sexual partners among MSM, Prishtina, 2014

	N*	%	95% CI
Had anal sex with a paying partner over the past 12 months			
Yes	71	28.8	20.2, 36.9
No	146	71.2	63.1, 79.4
Lubricant use at last anal sex with a paying partner			

Yes	41	47.1	33.5, 60.6
No	30	52.9	39.4, 66.5
Condom use at last anal sex with a paying partner			
Yes	64	93.2	88.1, 98.5
No	7	6.8	1.5, 11.9
Main reason for not using a condom at last anal sex with a paying partner			
Condom not available	2	18.6	4.5, 41.8
Partner is not infectious	1	2.8	0.3, 5.3
Partner/participant don't like sex with condoms	5	78.6	55.4, 101.6

Foreign male sexual partners

Among the 33% who reported having anal sex with a foreign partner in the past 12 months, 66% reported using a condom at last anal sex with partner (Table 10). Most MSM reported that their most recent foreign sex partner was from Europe.

Table 10. Foreign male sexual partners among MSM, Prishtina, 2014

	N*	%	95% CI
Had anal sex with foreign partner in past 12 months			
Yes	81	33.0	24.5, 41.3
No	134	67.0	58.6, 75.5
Condom use at last anal sex with foreign partner			
Yes	49	66.0	51.3, 79.8
No	30	34.4	20.2, 48.7
Country of origin of most recent foreign sex partner			
Albania	8	9.4	0.6, 18.2
Macedonia	6	13.2	2.9, 23.5
Balkans	7	9.3	2.0, 16.6
Europe	58	68.1	55.8, 80.2

Meeting male sex partners

Half of MSM reported meeting new male sex partners in the past 12 months through the internet; almost half of MSM reported using the internet weekly or more (Table 11). Almost all MSM reported never going to MSM-frequented commercial places and 56% reported never going to MSM-frequented public places.

Table 11. Meeting male sex partners in past 12 months among MSM, Prishtina, 2014

	N*	%	95% CI
Most frequent way to meet new male sex partners			
In person	56	23.3	17.0, 29.7
Internet	103	49.8	40.4, 59.2
Through friends	32	14.6	8.7, 20.5
I don't meet partners for sex	25	12.3	5.8, 18.8
Frequency of going to MSM-frequented commercial places			
Never	210	97.5	95.3, 99.7
Occasionally	6	2.1	0.01, 4.2
Weekly or more	1	0.04	0.03, 1.0
Frequency of going to MSM-frequented public places			
Never	109	55.8	47.1, 64.8
Occasionally	73	30.8	22.4, 39.0
Weekly or more	35	13.4	8.1, 18.5
Frequency of using the Internet to find male sexual partners			
Never	66	33.2	24.4, 42.1
Occasionally	46	21.0	12.9, 29.1
Weekly or more	105	45.8	35.1, 56.4

Sex with females

Eighty percent of MSM reported ever having vaginal or anal sex with a female (Table 12). MSM reported having a median number of two female sex partners (between 1 and 200) in the past 12 months; half reported a condom with their last female sex partner in the past 12 months.

Table 12. Sex with females among MSM, Prishtina, 2014

	N*	%	95% CI
Ever had vaginal or anal sex with females			
Yes	169	80.3	72.6, 88.1
No	48	19.7	11.9, 27.3
Median number of female sex partners (min., max.) in past 12 months	2 (1-200)		
Condom use at last sex with female in past 12 months			
Yes	75	50.0	39.5, 60.3
No	65	50.0	39.7, 60.5

General condom and lubricant use

The majority of MSM reported always using a condom for anal sex in the past 12 months and 70% reported doing so at their last anal sex encounter (Table 13). Just under one quarter of MSM reported experiencing condom breakage in the past 12 months. Forty percent of MSM reported always using lubricant for anal sex in the past 12 months, however only 2% reported using a water based lubricant at their last anal sex encounter.

Table 13. General condom and lubricant use among MSM, Prishtina, 2014

	N*	%	95% CI
Frequency of condom use for anal sex in past 12 months			
Always	150	69.4	61.1, 77.6
Sometimes	42	19.4	12.2, 26.6
Rarely/never	25	11.2	5.9, 16.5
Used a condom at last anal intercourse			
Yes	144	70.3	62.2, 78.5
No	73	29.7	21.5, 37.8
Experienced condom breakage in 12 months			
Yes	58	21.8	14.6, 29.0
No	150	78.2	71.0, 85.4

Frequency of lubricant use for anal sex in past 12 months			
Always	98	41.0	31.6, 50.3
Sometimes	50	22.1	14.6, 29.6
Rarely/never	69	36.9	28.2, 45.7
Types of lubricants commonly used for anal sex in past 12 months			
Body cream/ Hand lotion	210	97.5	95.3, 99.7
Water based lubricant (Durex)	6	2.1	0.001, 4.2
Other	1	0.4	0.3, 1.0

Alcohol, drug use and injection practices in past 12 months

Twenty percent of MSM reported using Alcohol and 6% reported using marijuana regularly in the past 12 months (Table 14). Few MSM reported using Cocaine, Amphetamine, Amyl nitrate, Hallucinogenic drugs or diazepam. Only two MSM reported injecting drugs; these participants reported only injecting heroin sometimes.

Table 14. Alcohol/drug use and injection practices in past 12 months among MSM, Prishtina 2014

	N*	%	95% CI
Alcohol			
Never	120	67.1	59.0, 75.4
Once a week	32	12.7	7.2, 18.1
Regularly	43	20.2	13.1, 27.1
Cocaine			
Never	210	95.9	92.0, 99.8
Sometimes	4	2.6	0.8, 6.1
Regularly	3	1.4	0.5, 3.3
Amphetamine			
Never	212	97.0	93.2, 100.0
Sometimes	5	3.0	0.5, 6.7
Regularly	--	--	--
Marijuana			
Never	181	86.8	81.2, 92.4
Sometimes	16	7.3	2.4, 12.1
Regularly	20	5.9	2.2, 0.9
Amyl nitrate			
Never	208	95.6	91.5, 99.6
Sometimes	7	4.1	0.1, 8.1
Regularly	2	0.3	0.01, 0.5

Hallucinogenic drug			
Never	215	98.2	95.7, 100.0
Sometimes	2	1.8	0.07, 4.3
Regularly	--	--	--
Diazepam			
Never	215	98.5	97.1, 99.9
Sometimes	1	0.5	0.2, 1.0
Regularly	1	0.9	0.3, 2.1
Heroin			
Never	215	99.3	98.2, 100.0
Sometimes	2	0.7	0.4, 1.8
Regularly	--	--	--
Injection drug			
Yes	2	0.7	0.5, 1.9
No	212	99.3	98.1, 100.0

Stigma, discrimination and violence

Few MSM have ever been physically attached or physically or verbally abused by police because of being MSM (Table 15). However, 28% have ever been verbally abused because of being MSM. Thirteen percent of MSM reported being incarcerated once. Only 29% of MSM reported that someone in their family knows they have sex with men and 52% reported that a non MSM close friend knows they have sex with men. Just over 7% of MSM reported being forced to have sex in the past 12 months.

Table 15. Stigma, discrimination and violence among MSM, Prishtina, 2014

	N*	%	95% CI
Ever been physically attacked because of being MSM			
Yes, once	17	6.0	2.4,9.6
Yes, multiple times	17	4.5	0.8,7.9
No	183	89.4	84.5,94.5
Ever been verbally abused because of being MSM			
Yes, once	14	5.9	1.6,10.2
Yes, multiple times	84	27.6	19.6,35.3
No	119	66.3	57.9,75.0
Ever been physically or verbally abused by the police because of being MSM			

Yes, once	6	1.0	0.1,2.0
Yes, multiple times	4	1.3	0.4,3.1
No	207	97.5	95.5,99.3
Ever been incarcerated			
Yes, once	26	12.9	6.2,19.7
Yes, multiple times	15	4.7	1.8,7.5
No	176	82.2	75.1,89.4
Someone in the family knows he/she is MSM			
Yes	71	28.6	20.1,37.1
No	145	71.3	62.8,79.8
Close non-MSM friend knows he/she is MSM			
Yes	131	51.5	42.0,61.0
No	85	48.4	38.9,57.9
Forced to have sexual intercourse in past 12 months			
Yes	19	7.5	3.3,11.8
No	198	92.4	88.1,96.6

STI signs and symptoms in past 12 months

Nine percent of MSM reported having genital discharge, 2.8% reported burning pain on urination and 0.5% reported genital ulcers or sores, 5.2% reported swelling in the groin and 4.3% reported anal ulcers or sores in the past 12 months (Table 16). Among those reporting having an STI symptom in the past 12 months, 55% did not seek any professional assistance and 14% sought only assistance at a pharmacy. Five percent of MSM have been diagnosed with an STI in the past 12 months.

Table 16. STI signs and symptoms in past 12 months among MSM, Prishtina, 2014

	N*	%	95% CI
STI symptoms			
Genital discharge			
Yes	21	8.7	3.7,13.6
No	195	91.2	86.3,96.2
Burning pain on urination			
Yes	61	2.8	2.0,36.8
No	156	7.1	63.1,79.3
Genital ulcers/sores			
Yes	2	0.5	0.2,1.2

No	215	99.4	98.7,100.2
Swelling in groin area			
Yes	15	5.2	2.0,8.4
No	202	94.7	91.5,97.9
Anal ulcers/sores			
Yes	8	4.3	1.2,7.5
No	208	95.6	92.4,98.7
Sought professional help for STI symptoms			
Yes, private doctor	5	10.2	0.1,20.5
Yes, public doctor	18	19.9	6.0,33.9
No help	40	55.5	40.4,70.6
Self-medication (from pharmacy)	14	14.3	5.3,23.1
Diagnosed with an STI			
Yes	11	4.7	1.6,7.8
No	206	95.2	92.1,98.3

HIV knowledge

Only one quarter of MSM had correct HIV transmission knowledge based on a composite of correctly responding to five HIV knowledge questions (Table 17). Almost all MSM reported knowing that having sex with only one faithful, uninfected partner and that using a condom correctly every time during anal sex are protective against HIV infection. The majority of MSM also knew that HIV can be transmitted by using a needle and/or syringe already used by someone else and that a healthy looking person can have HIV. However, more than 35% of MSM believed that someone can be infected with HIV by sharing a toilet, through mosquito bites and by sharing a meal with someone who is infected with HIV. Seventeen percent of MSM reported knowing someone who has died of AIDS but 39% believe that they are at no risk for HIV infection.

Table 17. HIV knowledge among MSM, Prishtina, 2014

	N*	%	95% CI
Has correct HIV transmission Knowledge			
Yes	60	25.4	16.7,34.0
No	157	74.6	66.0,83.3
Having sex with only one faithful, uninfected partner reduce the risk of HIV transmission			

Yes	169	81.4	74.9,87.9
No	48	18.5	12.0,25.0
Using a condom correctly every time during anal sex can protect someone from getting infected with HIV			
Yes	203	95.9	93.1,98.8
No	14	4.0	1.1,6.8
HIV can be transmitted by using a needle and/or syringe already used by somebody else			
Yes	192	87.1	80.0,94.2
No	25	12.8	5.7,19.9
A healthy-looking person can have HIV			
Yes	189	86.4	80.3,92.4
No	28	13.5	7.5,19.6
Someone can get HIV by using the same toilet with a person already infected with HIV			
Yes	93	42.8	33.5,52.2
No	124	57.1	47.7,66.5
A person can get HIV from mosquito bites			
Yes	93	39.1	30.6,47.8
No	126	60.8	52.2,69.3
A person can get HIV by sharing a meal with someone who is infected			
Yes	72	39.4	30.4,48.5
No	145	60.6	51.5,69.5
Knows someone infected or has died of HIV			
Yes	43	17.3	10.7,24.5
No	174	82.6	75.5,89.8
Perceived risk of getting infected			
No risk	73	39.3	29.8,48.9
Small risk	61	27.7	19.5,35.9
Moderate risk	56	21.9	14.7,29.1
High risk	27	11.0	5.7,16.3

HIV testing

Most MSM know where to get an HIV test, 73% have ever been tested, among which 47% have been tested in the past 12 months (Table 18). Among those tested in the past 12 months, 93% received their test results from their last test and among all participants ever tested, 69% had an HIV test and received their test results in the past 12 months.

Table 18. HIV testing among MSM, Prishtina, 2014

	N*	%	95% CI
Possible to get HIV test in Prishtina			
Yes	187	90.8	86.4,95.3
No	30	9.1	4.6,13.6
Has ever been tested for HIV			
Yes	160	72.7	64.0,81.5
No	56	27.2	18.5,36.0
Tested for HIV in past 12 months (among those tested ever tested)			
Yes	79	46.5	35.2,57.7
No	83	53.5	42.3,64.8
Received results of your last test (among those tested in last 12 months)			
Yes	149	92.7	87.9,97.4
No	11	7.3	2.5,12.0
Tested for HIV in past 12 months (among all participants)			
Yes	149	66.8	57.0,76.6
No	68	33.1	23.3,42.9
Participant received HIV test result at last testing			
Negative	149	95.3	90.0,100.5
Refuse to answer	3	4.6	0.5,9.9

Condom and prevention coverage

Almost all MSM reported that they can obtain condoms when needed and 74% reported receiving free condoms in the past 12 months (Table 19). Fifteen percent of MSM reported ever being exposed to information about HIV or safer sex and only .5% reported receiving peer education services.

Table 19. Condom and prevention coverage among MSM, Prishtina, 2014

	N*	%	95% CI
Can obtain condoms when needed			
Yes	207	94.9	91.1,98.6
No	6	3.4	0.3,6.5
Don't uses condom	3	1.5	0.5,3.7
Reason for not being able to obtain condoms			
Too expensive	3	32.5	2.9,61.4
Shop/pharmacy too far	1	25.2	15.1,66.0
Shy to buy condoms	2	42.2	0.01,84.7
Received free condoms in past 12 months			
Yes	166	73.5	65.4,81.4
No	51	26.5	18.5,34.5
Most recent exposure to information about HIV or safer sex			
Last month	83	34.6	24.7,44.7
Last year	61	29.3	20.7,38.1
Over a year ago	36	20.7	13.1,28.4
Never	36	15.2	8.6,21.8
Received peer education services			
Yes	5	0.7	0.2,1.7
No	212	99.2	98.2,100.2

HIV, HBV and Syphilis Prevalence

HIV prevalence among MSM was 0.5%, presence of HBsAg (infectious HBV) was 5.6%, presence of AntiHBsAg (may indicate previous vaccine or contact with HBV) was 27.9%, secondary syphilis infection was 2% and recent contact with Treponema pallidum (the causative agent of Syphilis) was 2.7%.

Table 20. HIV, HBV and Syphilis Prevalence among MSM, Prishtina, 2014

Disease prevalence	N*	%	95% CI
HIV			
Negative	212	99.4	98.8,100.0
Positive	5	0.5	0.07,1.1
HBV (HBsAg)			
Negative	207	94.3	90.2,98.4
Positive	10	5.6	1.5,9.7
HBV (AntiHBsAg)			
Negative	165	72.0	63.4,80.5
Positive	52	27.9	19.1,36.1
Syphilis (IgG)			
Negative	212	97.8	95.4,100.1
Positive	5	2.1	0.1,4.5
Syphilis (IgM)			
Negative	208	97.3	95.1,99.7
Positive	9	2.7	0.3,4.9

POPULATION SIZE ESTIMATIONS FOR MSM

Unique Object

One week prior to the commencement of the surveys, 432 unique objects (key chains) were distributed by peer outreach workers to MSM in Prishtina. The weighted estimate for those who responded that they had received the unique object was 0.9% among MSM in Prishtina (Table 21). According to the results of the unique object multiplier, the final population size estimation for MSM in Prishtina is 4, 800.

Table 21. Population size estimates of MSM in Prishtina using the unique object method

	MSM Prishtina
Number of unique objects distributed	432
Percent[ii] who reported receiving unique object	0.9%
Calculation	432/.09=
Population Size	**4,800**
Standard Error	0.03
95% Confidence bounds	1,623-7,969

Service Multiplier for HIV tests

The number of unique visits by MSM in Prishtina for VCT testing six months prior to the survey was 139 (Table 22). The percentage of MSM who reported receiving VCT from CSGD during the same time period was 17%. The resulting population sizes using the VCT service multipliers is 818 for MSM in Prishtina. These results are likely to be under representations due to the violation of the assumption of non-independence between the service and the survey (e.g., people who received VCT were more likely to go to the service since the survey was held at the same place as the service is provided).

[ii]Percentages are weighted using RDSAnalyst using the successive sampling estimator.

Table 22. Population size estimates of MSM in Prishtina using service multipliers for HIV testing

	MSM Prishtina
Number of unique visits for VCT	139
Percent[iii] who reported receiving HIV test	17%
Calculation	139/.17 =
Population Size	**818**
Standard Error	.04
95% Confidence bounds	418, 1219

Service Multiplier for Condom Distribution

The number of condoms distributed to unique MSM in Prishtina six months prior to the survey was 738 and the percentage who reported receiving a condom during that same time period was 67%, resulting in a population size estimation of 1,102 MSM (Table 23).

Table 23. Population size estimates of MSM in Prishtina using condom distribution multipliers

	MSM in Prishtina
Number of condoms distributed to unique persons	738
Percent[iv] who reported receiving a condom	67%
Calculation	738/.67=
Population Size	**1,102**
Standard Error	0.05
95% Confidence bounds	932 1,282

[iii] Ibid.
[iv] Ibid

SS Size

The output of the SS Size provides means, median and modes as well as a plausible bounds (Table 24). Inputs include the minimum number (sample size) and a maximum number based on the findings from the unique object multipliers. The mean is the best estimate of the population sizes.

Table 24. Population size estimates of MSM in Prishtina using service multipliers for HIV testing

	MSM Prishtina
Mean, Median, Mode	5628, 3498, 1486
Plausibility bounds	418-1,219

Wisdom of the Crowds

The table below shows the different estimations provided by MSM survey participants in Prishtina (Table 25). The most likely accurate size estimate reported by MSM was 1,634.

Table 25. Population size estimates of MSM in Prishtina using wisdom of the crowds

	MSM Prishtina
Mean most likely lowest	978
Mean most likely highest	2,196
Mean most likely accurate	1,634

Final estimated population sizes

There are some large differences between multipliers. Some of these findings should be used only as 'benchmarks' for triangulating the most plausible population size estimations (Table 26). It is likely that the VCT service multiplier which resulted in a population size of 818 MSM produced underestimations due to the violation of the assumption of independence. Selecting the midrange of the other population size estimations may provide the most realistic estimates of 5,214 MSM in Prishtina. If we estimate that there are roughly

81,000[v] adult males in Prishtina and that 5200 are having sex with men, then we can say that 6.4% of adult males have sex with males. If we use this calculation for the entire population of adult males in Kosovo (713, 000) then we can say that 45, 632 men in Kosovo have sex with men.

Another scenario is to take the midrange of all estimates which results in 2796 MSM. Similar to above, if we estimate that there are roughly 81,000 adult males in Prishtina and that 2796 are having sex with men, then we can say that 3.5% of adult males have sex with males. If we use this calculation for the entire population of adult males in Kosovo (713, 000) then we can say that 24, 955 men in Kosovo have sex with men.

Table 26. Final Most Realistic Population size estimates MSM in Prishtina

City	Unique object	Service Multiplier-VCT	Service Multiplier-Condom	Wisdom of the crowds (mean)	SS Size	Final best Estimates
MSM, Prishtina	4,800	818	1,102	1,634	5,628	**5,214**

[v] Calculated by taking 49% of total population of Prishtina (205,133) and Kosovo (1,815,606) estimated in 2012 and then subtracting 23% to account for population under 18 years. Data accessed from http://ask.rks-gov.net/eng/.

DISCUSSION AND RECOMMENDATIONS

High-risk sexual behaviors

Most MSM have multiple sex partners or concurrent relationships with different partner types including "steady", "casual", "commercial" and foreign male partners and female partners. Condom use was inconsistent with all partner types. One quarter of MSM reported having group sex in the past year among which 27% did not use a condom during their last group sex experience. Inconsistent condom use and multiple sexual partners with male and female sex partners, including in group and commercial sex situations, highlights numerous opportunities for HIV and STI transmission to other male sex partners as well as to the general population in Kosovo. Behavior change interventions and communications aimed at partner reduction, knowing a partner's HIV status before engaging in sex, and the promotion of condom use among MSM are urgently needed. The reasons given for not using a condom at last anal sex with a man was because it was not available, not pleasurable and because they trust their partner. More in-depth knowledge about the situations and conditions under which men do not use condoms given their knowledge of the potential risk of not doing so is needed.

Access to condoms and peer education services

The majority of MSM reported that they knew that they could obtain condoms when needed. Although three quarters of MSM reported receiving condoms for free from NGOs in the past 12 months, only 0.7% reported receiving peer education services. Peer outreach is a low cost and highly effective method to educate and encourage MSM to use condoms and to obtain HIV testing. Peer education services should be expanded in Kosovo.

Unprotected sex with females

Eighty percent of MSM reported having vaginal sex with females, among which half did not use a condom in the past 12 months. It is not known whether female partners of MSM are aware that their male partners are having sex with males. Nor is it known whether MSM are having sex with females in order to hide that they are not heterosexual. Given that MSM practice low condom usage with female (and male) partners, strategies are needed to reduce HIV transmission among intimate partners including scaling up HIV prevention interventions to emphasize the importance of protecting female and male partners and conducting further research to improve understanding of the dynamics of HIV transmission among intimate partners.

Low Alcohol and drug use-moderate non-injection drug use

Only 20% of MSM reported regularly using alcohol and fewer reported using any drugs. Only two MSM reported injecting drugs. Despite the currently low prevalence of injection drug use among MSM, the overlap of high-risk sexual and drug using networks should continue to be monitored.

Inconsistent HIV transmission knowledge

Only one quarter of MSM had correct knowledge of HIV transmission based on a composite question recommended by Global AIDS Response Progress Reporting[12] (GARPR). Around 40% of MSM incorrectly thought that HIV could be spread by sharing a toilet seat, from mosquito bites and by sharing meals. However, almost all MSM knew that using a condom correctly every time during anal sex can protect someone from getting infected with HIV. Having correct information about HIV transmission is important for protecting MSM and others from expanded transmission of HIV. Comprehensive HIV and sage sex education should begin before secondary school, especially since 23% of MSM only have a primary school education. Other methods for expanding education and safe sex education should

be explored. Additionally, it could be useful to make use of the knowledge that PWID constitute large social networks (as confirmed by the effective recruitment of PWID in Prishtina and Prizren) to deliver prevention through peer driven intervention modalities.

Moderate HIV Testing

Just under three quarters of MSM have been tested for HIV, and almost half of those have been tested in the past 12 months. Regular HIV testing among MSM who practice high risk sexual behaviors is essential to ensuring that HIV transmission remains low in Kosovo.

Low STI Diagnosis and Syphilis infection

Just 5% reported being diagnosed with an STI in the past 12 months and just 3% were positive for active syphilis infection.

Moderate and Low levels of physical abuse and high levels of hiddenness

MSM in Kosovo suffer from moderate levels of verbal abuse (27.6% reported being verbally abused multiple times) and low levels of physical abuse because people believed the participant has sex with other men. It is unknown whether moderate and low levels of verbal or physical abuse is related to MSM in Prishtina being hidden. Only 29% of MSM reported that a family member and 52% reported that a close non-MSM friend knew he/she was MSM. All of these findings suggest that MSM face multiple levels of discrimination and stigma in Kosovo. Feeling stigmatized and discriminated against can result feeling rejected, isolated and depressed. More research is needed among MSM to determine the methods and sources of stigmatization and discrimination. Enhancement of ongoing community educational and awareness programs may be needed to reduce verbal and other abuses committed against this, and other, “different” populations.

Low prevalence of HIV

This survey found HIV, although low, among MSM in Prishtina. No HIV was found among MSM in the surveys conducted in 2006 and 2011. The emergence of HIV in this population highlights the need to continue to monitor HIV, as well as other STI, in order to control further transmission. MSM were found to have low prevalence of syphilis and HBV in this current survey.

Population size estimations

Final population size estimations ranged from 818 to 5,628. For the purposes of extrapolating to the city of Prishtina and the country of Kosovo, we could use the midrange between the unique object multiplier and the SS size and calculated a final city population size of 5200 and a country population size of 45, 632, which is about 6.4% of the adult male population. Another alternative is to use all midrange estimates resulting in a country population size of 24, 955 or 3.5% of the adult male population. Findings from current population size estimation techniques should be interpreted with caution and they should be triangulated with other methods to derive the most accurate estimate.

STUDY FINDINGS AMONG PEOPLE WHO INJECT DRUGS

Overview

Over the course of roughly three months, beginning in July 2014, 300 PWID (including five seeds) in Prishtina and 199 PWID (including four seeds) in Prizren were recruited into the survey. The maximum number of waves reached in the recruitment chain in Prishtina was 14 and in Prizren was 13 (see recruitment graphs, figure 3 and 4). Seeds are identified in the recruitment graphs as larger grey squares and only have arrow leading away from them rather than towards them.

Figure 3. Recruitment graph of the PWID sample (n=300), with five recruitment chains, Prishtina, Kosovo, 2014.

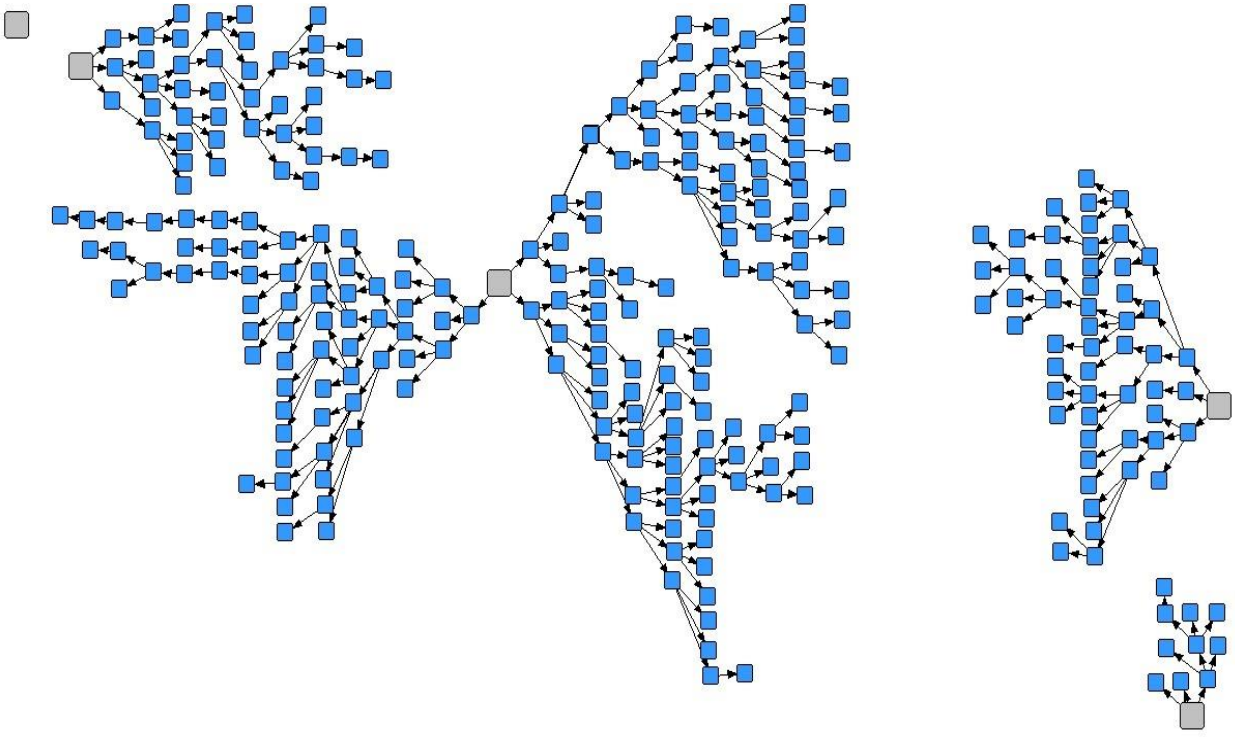
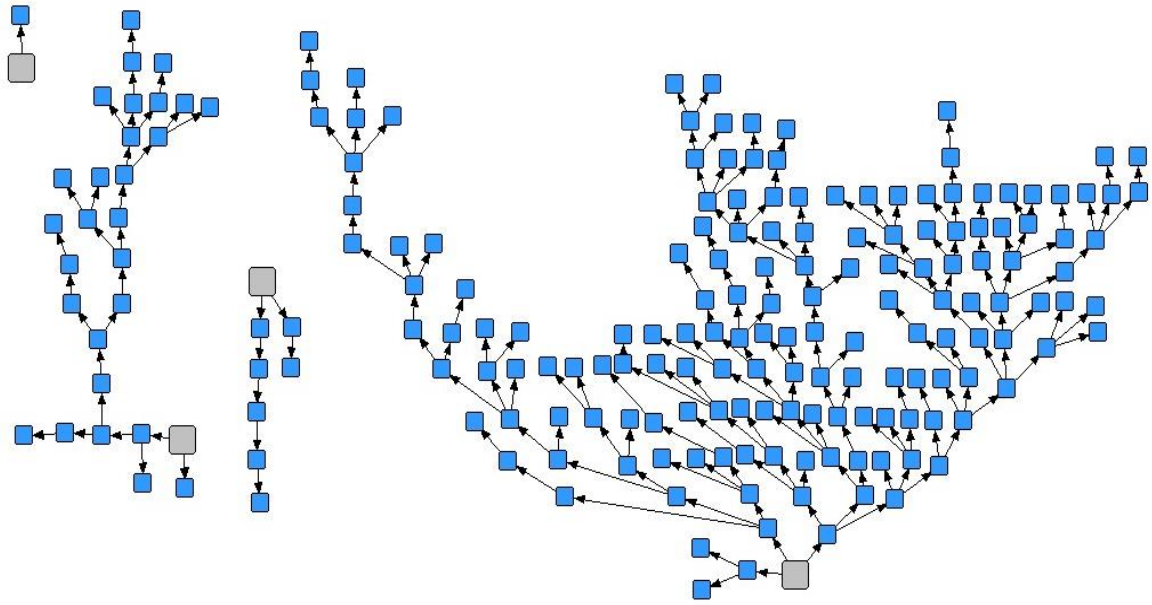


Figure 4. Recruitment graph of the PWID sample (n=199), with five recruitment chains, Prizren, Kosovo, 2014.



Socio-demographic characteristics

The majority of PWID in Prizren were younger (18 to 24 years of age) compared to Prishtina (Table 27). Six percent in Prishtina and 9% in Prizren were female. The majority of PWID in both cities reported having secondary education or more, being single, co-habituating, and being employed.

Table 27. Socio-demographic characteristics of PWID, 2014

	N	%	95% CI	N	%	95% CI
	Prishtina			Prizren		
Age Groups						
18-24	85	32.7	24.4,41.9	107	57.9	48.4,68.6
25-29	76	23.4	16.8,29.6	36	17.2	9.7,24.2
30-39	88	28.9	21.7,35.7	38	16.9	10.9,22.6
40-49	42	13.2	7.75,18.7	18	7.8	2.1,13.1
50+	9	1.7	0.3,2.9	- -	- -	- -
Age Groups						
≤ 24	85	32.8	24.5,41.7	107	57.9	48.7,68.3

≥ 25	215	67.2	58.3,75.4	92	42.0	31.7,51.3
Median age in years (Min.-Max.)						
	28 (18-69)			23 (18 -47)		
Gender						
Male	282	94.3	90.6,98.1	184	91.4	85.6,96.9
Female	18	5.67	1.8,9.4	15	8.5	3.1,14.3
Education						
No formal education	38	12.1	6.5,17.8	2	1.4	0.3,3.3
Primary	95	30.8	23.6,37.9	52	23.5	13.6,32.8
Secondary	143	47.2	38.6,55.8	114	63.3	54.7,73.7
College/university	24	9.7	4.4,15.3	31	11.5	6.2,15.9
Marital status						
Married	98	28.7	21.7,35.1	37	16.4	8.9,23.3
Divorced/widowed	39	9.9	5.5,13.7	3	1.4	0.2,3.1
In steady relationship	21	7.7	3.8,11.7	36	22.3	13.9,31.3
Single	141	53.6	46.4,61.8	123	60.1	50.6,69.0
Living arrangements in past three months						
Own home	128	41.1	33.6,48.3	69	33.5	23.6,43.5
Private (Other's house)	156	53.4	46.3,60.8	128	66.2	56.3,76.2
Public place (street/park)	16	5.4	1.7,9.1	2	0.3	0.08,0.5
Income source in past month						
No income	88	27.0	19.0,34.6	6	1.6	0.009,2.9
Employed	109	42.1	34.4,50.8	107	56.6	47.5,66.5
Informal/illegal income	103	30.8	23.6,37.3	86	41.7	32.0,50.9

General drug use

Almost 100% of PWID in Prishtina and 85% in Prizren ever used heroin and 56% in Prishtina and 55% in Prishtina used heroin in the past month (Table 28).

Table 28. General drug use among PWID, 2014

	N	%	95% CI	N	%	95% CI
	Prishtina			Prizren		
Drugs ever used						
Heroin	297	99.3	98.7,1.0	169	84.6	77.6,91.4
Cocaine	125	34.3	26.3,40.9	133	66.6	57.8,75.5
Heroin/cocaine together	95	22.1	15.7,26.7	54	22.2	14.1,29.0
Amphetamine	35	0.9	0.5,13.7	36	16.1	9.8,22.0
Morphine	45	11.9	0.7,16.2	23	8.3	3.8,11.9
Opium	33	0.7	0.4,10.9	45	25.5	18.4,33.4
Methadone	223	66.3	57.7,73.4	133	65.1	55.5,74.1
Diazepam	181	53.6	45.4,60.5	125	55.9	46.0,63.9
Drugs used in past month						
Heroin	148	56.4	49.5,64.5	108	54.9	45.0,64.9
Heroin/cocaine together	6	0.8	0.002,1.4	33	20.6	12.8,29.5
Methadone	144	41.7	33.7,48.7	48	18.0	10.0,24.3
Other	2	1.0	0.5,2.6	10	6.4	2.0,11.2

Injection practices

The median age of first injection in Prishtina was 20 and in Prizren was 18 years (Table 29). Most PWID in both cities reported injecting once a day or more and injecting on the previous day before enrolling in the survey. The majority of PWID in Prishtina reported injecting at their home (73%), whereas a majority of PWID in Prizren reported injecting in shooting galleries (40%), followed by injecting at their home (38%). Sixty three percent in Prishtina and 45% in Prizren reported being with a median number of two other people the last time they injected.

Table 29.Injection practices among PWID, 2014

	N	%	95% CI	N	%	95% CI
	Prishtina			Prizren		
Median age at first drug injection in years (Min.-Max.)						
	20 (12-50)			18(10-39)		
Frequency of injecting in past month						
Once a day or more	159	61.9	55.3,70.1	76	48.4	40.4,59.1
Once or more in week	53	16.3	10.6,21.7	74	29.3	20.5,36.0
Once or more in month	88	21.7	15.1,27.2	49	22.3	15.4,28.6
Injected on the previous day						
Yes	175	70.3	65.5,76.9	108	62.1	54.9,71.2
No	124	29.7	23.1,34.4	91	37.9	28.8,45.0
Median no of injections the previous day (Min.-Max.)						
	1 (1-13)			1 (1-7)		
Places where participant injected drugs in past month						
At home	213	72.6	66.3,79.2	77	37.5	28.7,45.9
Private house	25	9.7	4.9,14.6	12	5.9	2.1,9.7
Public place	30	7.5	3.9,10.8	39	16.2	9.2,22.2
Shooting gallery	31	10.0	5.7,14.3	71	40.4	31.3,50.7
Other people also injecting drugs at last injection time						
Yes	176	62.5	55.8,69.7	83	45.4	36.5,55.2
No	123	37.5	30.2,44.1	116	54.5	44.7,63.4
Median no of people also injecting drugs at last injection time (Min.-Max.)						
	2 (1-25)			2 (1-5)		

Needle and syringe sharing in past month

Although the overall percentages were low, a higher percentage of PWID in Prishtina than in Prizren, reported using needles or syringes previously used by someone else (Table 30). Most PWID in Prishtina reported sharing needles or syringes with friends or acquaintances and all in Prizren reported sharing with family or sexual partners. Percentages of using a filter/cotton wool, spoon/dish and water previously used by someone else were higher in Prishtina than in Prizren. Sixteen percent of PWID in Prishtina and 3% in Prizren reported that others used needles or syringes that had previously used by the participant. Unknown persons comprised the highest percentage of those who used needles or syringes previously used by the participant.

Table 30. Needle, syringe and equipment sharing in past month among PWID, 2014

	N	%	95% CI	N	%	95% CI
	Prishtina			Prizren		
Shared a needle/syringe (participant used it after someone else)						
Yes	60	13.8	9.3,17.2	9	2.7	0.5,4.6
No	236	86.1	82.7,90.7	190	97.2	95.3,99.4
Median number of people that used needle/syringe before participant (Min.-Max.)						
	1 (1-7)			1 (1-1)		
Relationship to people who used needle/syringe before participant						
Friends/acquaintances	54	94.4	81.1,1.08	--	--	--
Family/sex partner	5	5.5	8.4,18.9	9	100	--
Injected drugs from syringe in which someone else put drug from his/her syringe						
Yes	58	14.0	9.3,17.7	3	0.5	0.02,0.9
No	242	85.9	82.3,90.7	196	99.4	99.0,100
Used filter/cotton wool previously used before participant						
Yes	86	24.5	18.5,29.8	42	8.6	4.5,9.3
No	214	75.4	70.1,81.4	157	91.3	90.6,95.4
Used spoon/dish previously used before participant						
Yes	94	26.9	20.3,32.6	21	5.0	2.0,6.4
No	205	73.1	67.4,79.6	178	94.9	93.6,97.9
Used water previously used before participant to wash/rinse syringe						
Yes	92	26.1	19.6,31.8	41	8.2	4.2,8.9
No	208	73.9	68.2,80.4	158	91.7	91.0,95.7
Used syringe/needle previously used by participant (participant passed onto someone)						

Yes	64	15.8	11.2,19.6	12	2.8	1.1,3.6
No	236	84.2	80.4,88.8	187	97.1	96.4,98.8
Relationship to people who used needle/syringe previously used by participant						
Unknown person	56	86.9	65.3,108.1	9	91.7	78.6,106.0
Friend/acquaintance/ sex partner	6	11.6	9.4,33.3	1	8.2	6.0,21.3
Other	1	1.3	1.3,1.3	--	--	--

Use of sterile needles and syringes to inject drugs

Eighty three percent of PWID in Prishtina and 95% in Prizren reported using sterile needles or syringes at their last injection (Table 31). Similarly, high percentages of PWID in both cities reported mostly using sterile needles or syringes, the majority of which come from pharmacies, in the past month.

Table 31. Use of sterile needles and syringes to inject drugs among PWID, 2014

	N	%	95% CI	N	%	95% CI
	Prishtina			Prizren		
Used sterile needle/syringe at last injection						
Yes	231	83.0	78.9,88.1	176	95.2	94.4,97.9
No	68	16.9	11.9,21.0	23	4.7	2.1,5.5
Frequency of using sterile needle/syringe to inject drugs in past month						
Mostly	244	83.9	79.1,89.1	158	91.8	90.9,96.0
Sometimes	52	15.1	10.2,19.6	23	4.9	2.0,6.0
Rarely/never	4	0.9	0.1,1.9	18	3.2	1.3,3.6
Source of clean needle/syringe over past month						
pharmacy	294	98.7	97.7,99.8	156	90.3	87.2,93.5
street	32	8.4	5.1,11.8	2	0.3	0.001,0.7
clinic	3	0.8	0.1,1.6			
NGO	84	19.9	14.8,25.1	37	8.5	5.6,11.5
outreach	--	--	--	53	9.9	7.2,12.6

Cleaning and disinfecting needles and syringes

Although most PWID reported using sterile needles and syringes, 26% in Prishtina and 5% in Prizren reported “cleaning” or “disinfecting” needles and syringes the last time they injected (Table 32). Among those who reported cleaning or disinfecting needles and syringes the last time they injected, most of them reported using hot water and none of them reported using bleach to clean them.

Table 32. Cleaning and disinfecting needles and syringes among PWID, 2014

	N	%	95% CI	N	%	95% CI
	Prishtina			Prizren		
Cleaned/disinfected needle/syringe at last injection						
Yes	92	25.7	19.8,30.8	25	4.7	2.0,5.1
No	206	74.3	69.2,80.2	173	95.3	94.9,97.9
Cleaning/disinfection method use at last injection						
Cold water	6	4.6	0.5,8.4	2	6.8	1.3,11.8
Warm water	10	9.6	2.8,16.3	4	11.5	4.5,15.0
Hot water	38	45.5	28.0,63.9	16	63.8	5.0,81.4
Boiling water	13	12.3	4.0,20.3	2	6.0	2.1,8.6
Soap/detergent	--	--	--	2	7.9	0.3,19.3
Alcohol	24	27.7	11.5,44.0	1	3.7	0.01,8.0
Usual cleaning/disinfection method in past month						
Hot water	45	41.7	27.6,56.4	19	66.1	50.5,79.9
Alcohol	37	33.8	18.7,49.5	1	3.5	1.4,5.5
Other	33	24.4	14.0,33.8	8	30.2	16.6,45.8

General sexual behaviors

Ninety six percent of PWID in Prishtina and 90% in Prizren reported ever having sexual intercourse (Table 33). The mean age of first intercourse for PWID in Prishtina was 16 and for Prizren was 17 years. Among the 52% of PWID in Prishtina and 59% in Prizren who reported having sexual intercourse in the past month, 47% in Prishtina and 40% in Prizren used a condom at last intercourse; 42% in Prishtina and 56% in Prizren reported never using condoms in the past month.

Twenty one percent of PWID in both cities reported having intercourse with a partner who injected drugs in the past month and 32% in both cities used a condom at last intercourse with their sex partner who injected drugs. Among those who reported having sex in the past month, 54% of PWID in Prishtina and 37% in Prizren reported ever having anal sex, among which 61% in Prishtina and 45% reported using a condom at last anal sex. Of males who reported having sex in the past month, 16% in Prishtina and 9% in Prizren reported ever having anal sex with a man.

Table 33. General sexual behaviors among PWID, 2014

	N	%	95% CI	N	%	95% CI
	Prishtina			Prizren		
Ever had sexual intercourse (vaginal or anal)						
Yes	291	95.9	91.7,100.0	175	89.6	82.8,96.7
No	9	4.1	0.007,8.3	24	10.4	3.2,17.1
Median age at first intercourse (Min.-Max.)						
	16 (10-23)			17(11-22)		
Had sexual intercourse in past month						
Yes	167	51.9	44.2,59.0	109	59.3	47.9,70.1
No	126	48.0	41.0,55.8	64	40.6	29.9,52.1
Median number of sexual partners in past month (Min.-Max.)						
	1 (1-10)				1 (1-6)	
Used condom at last intercourse in past month						
Yes	77	47.1	37.6,56.7	50	39.6	26.2,51.4
No	90	52.9	43.3,62.3	60	60.3	48.6,73.8

Frequency of condom use in past month						
Always	67	38.6	28.8,48.1	44	36.6	24.3,48.1
Sometimes	32	19.6	12.7,26.6	8	6.9	0.1,13.6
Never	68	41.8	31.7,51.9	59	56.4	44.4,69.4
Had intercourse with partner who injects drugs in past month						
Yes	36	20.9	11.3,30.5	26	20.9	10.7,30.7
No	130	79.1	69.6,88.7	85	79.0	69.3,89.3
Used condom at last intercourse with partner who injects drugs in past month						
Yes	17	31.9	19.9,43.9	13	32.4	13.2,46.7
No	19	68.1	56.1,80.1	14	67.6	53.3,86.8
Ever had anal sex among those who had sex in past month						
Yes	92	44.8	33.9,53.7	37	37.1	26.3,49.0
No	75	55.2	46.3,66.1	73	62.9	50.9,73.7
Used condom at last anal sex among those who had sex in past month						
Yes	54	60.6	46.3,75.3	15	45.3	28.4,63.6
No	38	39.4	24.7,53,6	23	54.6	36.4,71.6
Ever had anal sex with a man among those who had sex in past month						
Yes	16	15.9	4.1,27.4	2	9.3	5.2,14.0
No	81	84.1	72.6,95.8	34	90.7	86.0,94.8

Commercial sex

Few PWID in either city reported ever receiving money, goods or drugs for sex; among those, 50% in Prishtina and 30% in Prizren reported doing so in the past year, and among those, 43% in Prishtina and 68% in Prizren used a condom at last such commercial sex (Table 34). Similarly, few PWID in either city reported ever giving money, goods or drugs for sex; among those 67% in Prishtina and 36 in Prizren reported doing so in the past year, and among those 44% in Prishtina and 72% in Prizren used a condom at last such commercial sex.

Table 34. Commercial sex among PWID, 2014

	N	%	95% CI	N	%	95% CI
	Prishtina			Prizren		
Ever received money/goods/drugs in exchange for sex						
Yes	21	8.6	3.7,12.6	7	5.6	0.3,10.7
No	143	91.3	87.3,96.3	103	94.3	89.2,99.6
Received money/goods/drugs in exchange for sex in past year						
Yes	15	49.7	27.3,69.8	4	30.4	1.5,53.1
No	12	50.3	30.2,72.6	4	69.6	46.8,98.4
Used condom at last intercourse in exchange for money/goods/drugs						
Yes	10	43.0	38.7,38.7	2	67.7	14.9,120.5
No	5	56.9	61.2,61.2	1	32.2	20.5,85.0
Ever gave someone money/goods/drugs in exchange for sex						
Yes	16	6.8	2.4,10.6	9	5.7	1.0,9.7
No	149	93.1	89.3,97.5	102	94.2	90.2,98.9
Gave someone money/goods/drugs in exchange for sex in past year						
Yes	12	67.3	46.0,87.6	4	36.4	0.4,72.6
No	5	32.6	12.4,54.0	7	63.5	27.3,99.5
Used condom at last intercourse in exchange for money/goods/drugs						
Yes	7	44.4	9.7,76.8	6	71.6	36.2,109.5
No	7	55.5	23.1,90.3	3	28.3	9.5,63.7

HIV Transmission Knowledge and Perceptions

Approximately half of PWID in both cities have correct HIV transmission knowledge based on a composite of five questions (Table 35). High percentages of PWID in both cities (slightly higher in Prizren) reported knowing that having sex with only one faithful, uninfected partner and that using a condom correctly every time during sex are protective against HIV infection. Most PWID in both cities also knew that HIV can be transmitted by using a needle and/or syringe already used by someone else and that a healthy looking person can have HIV. However, under 25% of PWID in both cities believed that someone can be infected with HIV by sharing a toilet and by sharing a meal with someone who is infected with HIV. Twenty five percent of PWID in Prishtina and 45% in Prizren believe that they are at no risk for HIV infection.

Table 35. HIV Transmission Knowledge and Perceptions among PWID, 2014

	N	%	95% CI	N	%	95% CI
	Prishtina			Prizren		
Has correct HIV transmission knowledge						
Yes	145	46.9	39.6,54.3	84	51.3	42.7,60.0
No	155	53.0	45.7,60.4	115	48.6	39.9,57.2
Having sex with only one faithful, uninfected partner reduces the risk of HIV transmission						
Yes	244	75.9	68.6,82.1	145	78.1	72.1,85.5
No	53	24.0	17.9,31.4	54	21.8	14.4,27.9
Using a condom correctly every time during sex can protect someone from getting infected with HIV						
Yes	244	76.9	69.1,83.9	166	86.3	81.4,91.7
No	56	23.0	16.1,30.9	33	13.7	8.2,18.5
HIV can be transmitted by using a needle and/or syringe already used by somebody else						
Yes	260	81.6	74.6,87.6	180	95.9	94.9,98.4
No	40	18.4	12.4,25.4	19	4.0	1.5,5.0
A healthy-looking person can have HIV						
Yes	191	61.3	53.1,69.1	145	81.8	76.1,90.0
No	109	38.7	30.9,46.8	54	18.1	9.9,23.9
Someone can get HIV by using the same toilet with a person already infected with HIV						

Yes	85	24.6	18.0,30.3	43	22.3	15.2,29.6
No	215	75.4	69.6,81.9	156	77.6	70.3,84.7
A person can get HIV by sharing a meal with someone who is infected						
Yes	70	19.1	13.5,23.8	45	20.5	13.4,27.0
No	230	80.9	76.1,86.5	154	79.5	72.9,86.6
Perceived risk becoming infected with HIV						
None	73	24.7	18.0,31.6	66	45.2	37.6,55.9
Small risk	126	46.9	40.2,54.7	76	41.3	32.9,50.5
Moderate risk	83	20.9	15.0,25.5	49	11.9	6.6,14.0
High risk	18	7.4	3.4,11.6	8	1.4	0.3,1.9

STI testing

Few PWID in both cities have been diagnosed with an STI in the past year (Table 36). Of those diagnosed with and STI in the past year, 35% in Prishtina and 58% in Prizren reported being treated.

Table 36. STI testing among PWID

	N	%	95% CI	N	%	95% CI
	Prishtina			Prizren		
Has been diagnosed with STI in past year						
Yes	8	3.0	0.08,6.2	10	4.1	1.2,6.8
No	290	96.9	93.8,100	189	95.8	93.1,98.7
Was treated for STI in past year						
Yes	4	35.4	7.8,76.3	6	57.9	56.3,56.3
No	4	64.6	23.6,100	3	42.0	43.6,43.6

HIV testing

Only 41% in Prishtina and 27% in Prizren know where to get free and anonymous test for HIV (Table 37). A higher percentage of PWID in Prishtina compared to Prizren have ever been tested for HIV and among those, 40% in Prishtina and 49% in Prizren were tested in the past year. Among all PWID, only 19% in Prishtina and 11% in Prizren were tested in the past year and among those testing in the past year, 95% in Prishtina and 95% in Prizren also received their test results. Two participants in Prishtina and one in Prizren reported having a positive test result the last time they were tested (despite no one being seropositive in this survey).

Table 37. HIV testing among PWID

	N	%	95% CI	N	%	95% CI
	Prishtina			Prizren		
Knows where to get free and anonymous test for HIV						
Yes	138	40.5	32.7,47.3	72	27.2	18.3,33.5
No	161	59.4	52.7,67.3	126	72.8	66.5,81.7
Has ever been tested for HIV						
Yes	148	42.9	36.4,49.5	58	23.6	14.8,31.1
No	151	57.0	50.5,63.5	139	76.3	68.8,85.2
Tested for HIV in past year (among those ever tested)						
Yes	70	39.6	27.9,50.3	32	49.0	30.2,66.3
No	84	60.3	49.7,72.1	28	50.9	33.7,69.7
Tested for HIV in past year (among all participants)						
Yes	73	19.1	13.8,24.4	31	11.1	6.6,15.5
No	227	80.8	75.5,96.1	168	88.8	84.4,93.3
HIV test in past year and received test results (among those tested in last year)						
Yes	66	95.4	93.3,97.6	31	95.1	82.6,100
No	4	4.6	2.4,6.7	1	4.8	6.9,17.3
Result of last HIV test						
Positive	2	1.7	0.04,3.3	1	4.8	6.2,16.6
Negative	57	80.1	70.0,90.9	19	65.1	49.1,83.7
Refuse to answer	15	18.1	7.5,28.2	12	29.9	13.5,43.2

PWID overdose and service access

The majority of PWID in both cities reported not having used Labyrinth service in the past year (Table 38). Forty two percent in Prishtina and 20% in Prizren reported ever receiving treatment to reduce or quit drug use, with the median age of most recent treatment being 27 years for Prishtina PWID and 21 years for Prizren PWID. The majority of PWID in both cities received treatment in a medical facility. Three times higher percentage of PWID in Prishtina than in Prizren reported ever overdosing on drugs. Among those, 57% in Prishtina and 44% in Prizren were treated in a medical facility. Twenty one percent in Prishtina and 49% in Prizren reported receiving condoms for free in the past year.

Table 38. Services accessed by PWID, 2014

	N	%	95% CI	N	%	95% CI
	Prishtina			Prizren		
Used Labyrinth services over the past year						
Yes	97	23.0	15.6,28.7	62	22.6	13.3,29.5
No	168	67.3	61.6,75.1	136	76.4	69.4,85.7
Doesn't know Labyrinth	35	9.6	5.8,13.0	1	0.8	0.8,2.8
Ever received treatment to reduce/quit drug use						
Yes	142	41.8	33.7,48.9	44	20.2	12.5,27.5
No	156	58.1	51.1,66.2	155	79.7	72.4,87.5
Median age at most recent treatment (Min.-Max.)						
	27 (14-65)			21 (11-43)		
Type of treatment received most recently						
NGO-run rehabilitation	18	12.2	3.3,20.9	10	12.7	2.4,20.2
Medical facility	76	51.1	39.1,62.7	34	87.3	79.7,97.5
Self-help	49	36.6	25.6,48.2	--	--	--
Ever overdosed						
Yes	109	30.4	23.3,36.3	30	10.2	5.6,13.4
No	187	69.5	63.6,76.6	169	89.8	86.5,94.3
Ever treated in medical center for overdosing						
Yes	63	56.5	43.8,69.0	15	44.0	22.9,62.6
No	46	43.4	30.9,56.1	15	55.9	37.4,77.0
Obtained free condoms from an NGO or outreach program in past year						
Yes	87	21.1	14.5,26.2	97	48.9	40.0,57.9
No	213	78.8	73.7,85.4	102	51.1	42.1,59.9

Arrests and incarceration

A higher percentage of PWID in Prishtina compared to Prizren (32% vs. 17%, respectively) reported being arrested for drug use (Table 39). Almost half of PWID in Prishtina and 18% in Prizren have ever been in prison. Among those, 12% in Prishtina and 38% in Prizren reported injecting drugs during their prison time.

Table 39. Arrests and incarceration among PWID, 2014

	N	%	95% CI	N	%	95% CI
	Prishtina			**Prizren**		
Ever been arrested for drug use						
Yes	123	31.7	23.9,37.7	49	17.3	10.4,22.5
No	176	68.3	62.4,76.1	150	82.6	77.7,89.5
Ever been in prison						
Yes	148	47.3	39.6,54.6	49	17.8	10.6,23.1
No	151	52.7	45.4,60.3	149	82.1	76.9,89.3
Injected drugs during prison time						
Yes	22	12.3	5.6,18.2	20	37.6	20.2,53.6
No	116	87.7	81.7,94.4	29	62.3	46.4,79.7

HIV, HBV, HCV, and Syphilis Prevalence

No PWID were infected with HIV (Table 40). Prevalence of HBsAg for Prishtina was 5% and for Prizren was 3%, prevalence of AntiHBs (may indicate previous vaccine or being in contact with HBV) was 22% in Prishtina and 19% in Prizren. Secondary syphilis infection was 2% in Prishtina and 0.1% in Prizren and recent contact with Treponema pallidum (the causative agent of Syphilis) was 1.4% in Prishtina and 3.3% in Prizren. The Presence of antibodies against HCV was 27% in Prishtina and 12% in Prizren.

Table 40. HIV, HBV, HCV, and Syphilis Prevalence among PWID, 2014

Disease prevalence	N*	%	95% CI	N*	%	95% CI
	Prishtina			Prizren		
HIV						
Negative	300	100	100	199	100	100
Positive	--	--	--	--	--	--
HBV (HBsAg)						
Negative	285	94.4	92.4,97.3	194	97.2	94.0,100
Positive	15	5.0	2.6,7.5	5	2.8	0.4,5.9
HBV (AntiHBs)						
Negative	232	78.5	72.7,84.4	155	81.0	74.1,88.4
Positive	68	21.5	15.6,27.2	44	18.9	11.5,25.8
HCV						
Negative	206	73.2	66.9,80.2	159	87.5	83.6,92.4
Positive	93	26.5	19.5,32.8	40	12.4	7.5,16.3
Syphilis (IgG)						
Negative	293	97.9	96.0,99.7	198	99.8	99.6,100
Positive	6	19.9	0.1,3.8	1	0.1	0.4,0.3
Syphilis (IgM)						
Negative	298	98.6	96.6,100	193	96.7	93.4,100
Positive	2	1.4	0.4,3.3	6	3.3	0.04,6.5

POPULATION SIZE ESTIMATIONS FOR PWID

Unique Object

One week prior to the commencement of the surveys, 600 unique objects (key chains) were distributed by peer outreach workers to PWID in Prishtina and 250 to PWID in Prizren. The weighted estimate for those who responded that they had received the unique object was 8.6% among PWID in Prishtina and 21.5% among PWID in Prizren. According to the results of the unique object multiplier, the final population size estimation for PWID in Prishtina is 6,600 and for PWID in Prizren is 1,137 (Table 41).

Table 41. Population size estimates of PWID in Prishtina and Prizren using the unique object method

	PWID Prishtina	PWID Prizren
Number of unique objects distributed	600	250
Percent[vi] who reported receiving unique object	8.6%	21.5%
Calculation	600/.086 =	250/.215 =
Population Size	**6,600**	**1,137**
Standard Error	0.02	0.04
95% Confidence bounds	3,715-9,620	709-1,566

Service Multiplier for HIV tests

The number of unique visits by PWID in Prishtina and Prizren for VCT testing six months prior to the survey was 128 and 40, respectively (Table 42). The percentage who reported receiving VCT at Labyrinth in Prishtina or Prizren during the same time period was 13.7% among PWID in Prishtina and 10.3% among PWID in Prizren. The resulting population sizes using the VCT service multipliers are 935 for PWID in Prishtina and 389 for PWID in Prizren. These results are likely to be under representations due to the violation of the assumption of non-independence between the service and the survey (e.g., people who received VCT

[vi]Percentages are weighted using RDSAnalyst using the successive sampling estimator.

were more likely to go to the service since the survey was held at the same place as the service is provided).

Table 42. Population size estimates of PWID in Prishtina and Prizren using service multipliers for HIV testing

	PWID Prishtina	PWID Prizren
Number of unique visits for VCT	128	40
Percent[vii] who reported receiving HIV test	13.7%	10.3%
Calculation	128/.137 =	40/.103 =
Population Size	**935**	**389**
Standard Error	.02	.02
95% Confidence bounds	623-1,248	199, 580

[vii] Ibid.

SS Size

The output of the SS Size provides means, median and modes as well as a plausible bounds (Table 43). Inputs include the minimum number (sample size) and a maximum number based on the findings from the unique object multipliers. The mean is the best estimate of the population sizes.

Table 43. Population size estimates of PWID in Prishtina and Prizren using service multipliers for HIV testing

	PWID Prishtina	PWID Prizren
Mean, Median, Mode	1232, 1050, 600	660, 608, 398
Plausibility bounds	692-2,288	426-1,090

Wisdom of the Crowds

The table below shows the different estimations provided by PWID in Prishtina and Prizren and MSM in Prishtina (Table 44). The numbers presented by PWID may be too low given that PWID may be less socially networked and aware of other PWID.

Table 44. Population size estimates of PWID in Prishtina and Prizren using wisdom of the crowds

	PWID Prishtina	PWID Prizren
Mean most likely lowest	285	57
Mean most likely highest	701	130
Mean most likely accurate	540	75

Final estimated population sizes

There are some large differences between multipliers within groups and cities. Some of these findings should be used only as 'benchmarks' for triangulating the most plausible population size estimations (Table 45). It is likely that the VCT service multipliers underestimated MSM due to the violation of the assumption of independence. The Wisdom of the Crowds methods seem to be underestimating the population sizes of PWID in Prizren, especially since the mean is lower than the sample size so this data point should not be used. Selecting the midrange between the unique object multiplier and the SS size may provide the most realistic estimates of 3,946 PWID in Prishtina and 1113 PWID in Prizren.

Using the adult population sizes of Prishtina as 158,000 and Prizren as 140,000, we can estimated that PWID in Prishtina comprise 2.5% and that PWID in Prizren comprise 0.8% of the adult population. [viii] Assuming these estimates are correct, if we take the mean of these percentages (1.7%) we could get some idea that the population size of PWID in Kosovo (although other methods are possible and this result is likely biased based on having only population size estimations for two cities) is around 30,000.

Table 45. Final Most Realistic Population size estimates of of PWID in Prishtina and Prizren

City	Unique object	Service Multiplier-VCT	Wisdom of the crowds (mean)	SS Size	Final best Estimates
PWID Prishtina	6,660	935	540	1232	**3,946**
PWID Prizren	1,137	389	75	1090	**1,113**

[viii] Calculated by using the total population sizes of Prishtina (205,133) and Prizren (181,756) and Kosovo (1,815,606) estimated in 2012 and then subtracting 23% to account for population under 18 years. Data accessed from http://ask.rks-gov.net/eng/.

DISCUSSION AND RECOMMENDATIONS

No HIV, Low Syphilis and HBV and Moderate HCV prevalence.

PWID in Prishtina and Prizren have no HIV and low syphilis. Efforts to maintain no HIV infections among PWID relies on having effective harm reduction services. PWID also were found to have fairly low active syphilis and infectious HBV prevalence. However, HCV prevalence was 27% in Prishtina and 12% in Prizren.

High consumption of different types of drugs.

PWID in Prishtina and Prizren consume many different types of drug, but mostly herion, methadone and Diazepam. Higher percentages of PWID in Prizren consume Cocaine, Amphetamine and Opium than in Prishtina. Cocaine and amphetamine, both of which are stimulants and highly addictive can lead to increased morbidity and sometimes mortality. Diazapam, a depressant, is often taken to enhance the euphoriant effects of opiates and taken with opiates is a major risk factor in drug-related deaths. Drug treatment programs for heroin users should ensure screening and provision of treatment for other drug use.

Low needle and syringe sharing

Although most PWID are daily injectors and inject drugs with other people, few reported sharing needles or syringes after someone else had already used it. In fact, most PWID in both cities reported using sterile needles and syringes at their last injection. This may account for the lack of HIV found in these popualtions and may be an indication that the high level of HCV infection are from old exposures. Continued efforts to ensure that PWID have access to clean needles and syringes, as well as to other harm reduction services, is essential to maintaining a zero prevlance of HIV. Additionally, it could be useful to make use of the knowledge that PWID constitute large social networks (as confirmed by the effective recruitment of PWID in Prishtina and Prizren) to deliver prevention through peer driven intervention modalities.

More PWID in Prishtina than in Prizren share injecting equipment

PWID in Prishtina reported percentages of sharing filters and cotton wool, spoons and dishes and water previously used by someone else that were over three times higher than in Prizren. Extra effort may be needed in Prishtina to reduce equipment sharing among PWID.

Few females captured in this survey

Although this survey only captured a small percentage of females, it is expected the number of female injectors in both cities is larger than what was found in this study. Female injectors tend to be more stigmatized and isolated than male injectors and often rely on male partners to buy drugs and injecting equipment for them. Female injectors generally have a higher HIV prevalence than male injectors.[13] Female injectors may not be well connected in the social networks of PWID and are often underestimated in PWID surveys. In depth qualitative research may be the best option available to study female injectors in Kosovo.

Low knowledge on how to disinfect syringes and needles.

Although the majority of PWID reported using new and sterile syringes and needles, some PWID reported that they have cleaned their syringes and needles using either boiling, hot, warm or cold warter or alcohol. No PWID reported using bleach.

A recent study showed that HIV can survive in a used syringe for at least four weeks and even small amounts of blood on hands, cookers, filters, tourniquets, or in rinse water can be enough to infect a user[14]. HCV is even more infective than HIV and can also last for long periods of time on injecting materials. One study found that PWID have a higher chance of being contaminated though sharing of a tainted spoon rather than a tainted syringe[15]. To reduce injecting risk behaviors such as sharing needles and injecting equipment, likely beneficial programs include drug consumption rooms and pharmacy access to needles in addition to dedicated needle and syringe exchange programs[16].

High risk sexual practices; only half of PWID are currently having sex.

Roughly 50% of PWID who reported ever having sexual intercourse reported having it in the past month. Only 47% in Prishtina and 40% in Prizren reported using a condom at last intercourse in the past month. Twenty one percent reported having sexual intercourse with someone who injects drugs and among those, only 32% reported using a condom. Behavior change interventions and communications aimed at promotion of condom use among PWID need to be reinforced.

Low knowledge about HIV transmission

Despite high percentages of PWID knowning that HIV can be transmitted by using a needle and/or syringe already used by somebody else, only half of PWID had correct knowledge about HIV transmission based on a composite question recommended by Global AIDS Response Progress Reporting[17] (GARPR). Around 20% of PWID in both cities incorrectly thought that HIV could be spread by sharing a toilet seat and by sharing meals.

HIV testing is low.

Low percentages of PWID know where to get a free and anonymous HIV test and among all PWID, only 19% in Prishtina and 11% in Prizren were tested in the past 12 months. It is interesting to note that two people in Prishtina and one person in Prizren who were tested in the past year and received their test results reported being positive (despite them not being seropositive in this survey).

More PWID in Prishtina received treatment to reduce or quit drugs than in Prizren

Just under one quarter of PWID in Prishtina and Prizren reported accessing services of Labyrinth in the past year and two times more PWID in Prishtina than in Prizren ever received treatment to reduce or quit drugs. The low numbers of PWID who access targeted services should be evaluated. Furthermore, the large number of PWID, especially in

Prishtina, who have received treatment and are still injecting, indicates that recidivism is high and that other treatment modalities need to be explored. A thorough assessment is needed to understand why PWID return to injecting drugs after receiving treatment.

In order to ensure the best outcomes from treatment, currently available evidence strongly supports opioid agonist maintenance treatment, combined with psychosocial assistance for keeping patients in treatment. Other beneficial treatment modalities include:

- Case management for reducing drug use
- Buprenorphine maintenance therapy
- Methadone maintenance therapy
- Naltrexone for patients forced to adhere to treatment
- Opioid assisted withdrawal with buprenorphine
- Psychosocial interventions in maintenance treatment
- Psychosocial assistance in addition to pharmacological assistance for opioid withdrawal

Each of these modalities would need to be evaluated to determine whether they are appropriate and feasible for PWID in Kosovo.

High prevalence of imprisonment in Prishtina

Just under half of PWID in Prishtina and 19% in Prizren have been in prison. Almost 40% in Prizren and 12% in Prishtina reported injecting drugs while in prison. Efforts to scale up harm reduction programs including access to clean needles, and opiate substitution therapy in prisons should be assessed.

PWID population sizes

Final population size estimations in Prishtina ranged from 540 to 6,600 and in Prizren from 75 to 1,137 using several population size estimation techniques. For the purposes of extrapolating to the city of Prishtina and Prizren and for the country of Kosovo, we used the midrange between the unique object multiplier and the SS size and calculated a final population size of 3,946 for Prishtina and 1135 for Prizren and a country population size of 30,000, which is about 1.7% of the adult population. Findings from current population size estimation techniques should be interpreted with caution and they should be triangulated with other methods to derive the most accurate estimate.

CONCLUSION

To conclude, survey findings clearly identify and confirm the need to continue enhancing current programs for PWID and MSM in Kosovo. Although no HIV was found among PWID and low prevalence among MSM, continued high risk injecting and/or sexual behaviors may lead to new or increased HIV transmission in these groups. Current programs serving PWID and MSM should be supported and undergo thorough evaluations to identify gaps and successes. This 2014 IBBS has provided important epidemiological data to better understand the current context of the HIV epidemic in Kosovo and should be used by policy makers to prioritize their resources for HIV prevention. It is recommended that furture HIV IBBS surveys be planned for PWID and MSM in order to monitor HIV transmssion and to better serve these populations.

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APPENDICES

Questionnaire for MSM

RDS Coupon Number_____

Date _____/_____/2014 **Time of enrolment**_____

Completed by _____
(Initials of interviewer)

QUESTIONNAIRE-MSM BBSS 2014
DEMOGRAPHIC CHARACTERISTICS
First, I would like to ask you a few questions regarding your background.

1. **How old are you?** | | rs |

2. **What is the highest level of education you completed? ONLY ONE ANSWER!**
1. No formal education
2. Primary
3. Secondary
4. College/university

3. **Which category currently describes you civil status? ONLY ONE ANSWER!**
1. Married
2. In a steady relationship with a man
3. In a steady relationship with a woman
4. Single
5. Divorced/widowed

5. !	6. If the answer was 4 (SINGLE) or 5 (DIVORCED/WIDOWED), skip to question 5

4. **If you are currently married or in a steady relationship, do you live with your spouse/partner?**
1. Yes
2. No

5. What was the main source of your income during the last month? ONLY ONE ANSWER!

1. Permanent employment
2. Temporary jobs or a part-time job
3. Family support
4. Spouse or partner support
5. Social welfare
6. Selling sex
7. Other (explain):_____

6. What was your average monthly income during the last 6 months?

1. Up to 100 EUR
2. 100 - 200 EUR
3. 200 - 300 EUR
4. 300 – 400 EUR
5. More than 400 EUR
6. No income
7. Refused to answer

7.How would you describe your gender?

1. Male
2. Female
3. Transgender

8.How would you describe your sexual orientation?

1. Homosexual
2. Bisexual
3. Heterosexual
4. Other:_____

9. How many people who speak Albanian and have had sex with a man in the last 12 months do you know by name, nickname or sight (And they know you by name or nickname)? **(Cannot be zero)** _____

10. How many of them live, work or socialize in Prishtina and are 18 years and above? _____
(Number must be the same or smaller than response in question 9, cannot be zero)

11. How many of them have you seen during the last month? _____
(Number must be the same or smaller than response in question 10, cannot be zero)

12. What is the main reason why you accepted the coupon and came here today? (Do not read the answers! **ONLY ONE ANSWER**)
    1. Incentive
    2. HIV test results
    3. Syphilis test results
    4. Hepatitis B test results
    5. All test results
    6. Because a friend/acquaintance/relative asked me to do it
    7. Had nothing better to do
    8. Thought the study sounded interesting
    9. Something else (state what): _____

QUESTIONS ON MOBILITY

Now, I would like to ask you a few questions regarding mobility.

13.In the last 12 months did you travel outside of Kosova?

1. Yes
2. No

!	If the answer was NO, skip to question number **16**

14. When traveling outside of Kosova in the last 12 months, in which country did you spend the most time?

Name of the country: _____

15. While visiting this country in the last 12 months, did you engage in anal sex with any men without using a condom?

1. Yes
2. No

16. In the last 12 months did you travel outside of Pristina?

1. Yes
2. No

!	If the answer was NO, skip to **HIV/AIDS KNOWLEDGE**

17. While visiting outside of Pristina in the last 12 months, did you engage in anal sex with any men without using a condom?

1. Yes
2. No

HIV/AIDS KNOWLEDGE

Now I will ask you some questions about what you know about HIV/AIDS

18. Can having sex with only one faithful, uninfected partner reduce the risk of HIV transmission?

1. Yes
2. No
3. Don't know

19. Can one protect himself from getting infected with HIV by using a condom correctly every time he has anal sex?

1. Yes
2. No
3. Don't know

20. Can HIV be transmitted by using a needle and/or syringe already used by somebody else?

1. Yes
2. No
3. Don't know

21. Can a healthy-looking person have HIV?

1. Yes
2. No
3. Don't know

22. Can a person get HIV by using the same toilet with a person already infected with HIV?

1. Yes
2. No
3. Don't know

23. Can a person get HIV from mosquito bites?

1. Yes
2. No
3. Don't know

24. Can a person get HIV by sharing a meal with someone who is infected?

1. Yes
2. No
3. Don't know

25. Do you personally know anyone who is infected with HIV or who has died of AIDS?

1. Yes
2. No
3. Refused to answer

26. How would you rate the risk of getting infected with HIV that you are personally exposed to?

1. There is no risk
2. The risk is small
3. The risk is moderate
4. The risk is high

SEX WITH MEN

The following questions refer to sexual activities with men. A passive partner in anal or oral sexual intercourse is the one who has his partner's penis in the anus or mouth, while the active partner is the one whose penis is in his partner's anus or mouth (use this explanation if needed).

27. How old were you when you had your first anal intercourse with a man (regardless of whether you were active or passive partner)?

	age

Note: Don't remember = 777; No such experience = 888

28. Regarding anal sex, which of the following experiences have you had?

1. I was an "active" partner (Placed your penis in the anus of another man)
2. I was a "passive" partner (Another men placed his penis in your anus)
3. I was both an active and a passive sexual partner with other men

29. In the last 12 months, how many men did you have oral sex with (regardless of whether you were active or passive partner)?

Note: Don't remember = 777; No such experience = 888

30. In the last 12 months, did you have oral sex without a condom in which your sexual partner ejaculated into your mouth?

1. Yes
2. No

31. In the last 12 months, how many men did you have anal sex with (regardless of whether you were active or passive partner)?

Note: Don't remember = 777

32. Did you participate in group sex (more than one sexual partner in the same time) in the past 12 months?

1. Yes
2. No

!	If the answer was NO, skip to **STEADY MALE SEX PARTNERS**

33. The last time you had group sex did you use a condom?

1. Yes
2. No

STEADY MALE SEX PARTNERS

Now I am going to ask you some questions about a steady male partner (a man with whom you are in a relationship) with whom you have anal sex.

34. Did you have a steady male partner with whom you had anal sex in the past one year?

1. Yes
2. No

!	If the answer was NO, skip to **CASUAL MALE SEX PARTNERS**

35. Do you know the HIV status of your last steady male partner?

1. No
2. Yes, he is HIV-negative
3. Yes, he is HIV-positive

36. In the last 12 months, did you have anal intercourse with a man while you were in a steady relationship with another man?

1. Yes
2. No

37. Was lubricant used the last time you had anal sex with your steady male partner?

1 Yes
2 No

38. Was a condom used the last time you had anal sex with your steady male partner (regardless of whether you were active or passive partner)?

1. Yes
2. No

!	If the answer was YES, skip to **CASUAL MALE SEX PARTNERS**

39. If a condom was NOT used during your last anal intercourse with a male partner, what was the main reason for not using it? (ONLY ONE ANSWER; do not read out answers!)

1. A condom was not available at that moment (neither me nor my partner had a condom)
2. My partner has no infections (it is safe; I trust my partner)
3. My partner and I are both positive; both negative (serosorting)
4. I don't like sex with condoms
5. My partner did not want to use a condom
6. I don't use condoms because they create problems with my erection
7. Other (explain): _____

CASUAL MALE SEX PARTNERS

Now I am going to ask you some questions about casual male partners (a man with whom you occasionally have or once had sex without being in a relationship) with whom you have anal sex.

40. Did you have any casual male partners with whom you had anal sex in the past one year?

1. Yes
2. No

!	If the answer was NO, skip to **PAID MALE SEX PARTNERS**

41. Was lubricant used the last time you had anal sex with a casual male partner?

1. Yes
2. No

42. Was a condom used the last time you had anal sex with a casual male partner (regardless of whether you were active or passive partner)?

1. Yes
2. No

!	If the answer was YES, skip to **PAID MALE SEX PARTNERS**

43. If a condom was NOT used during your last anal intercourse with a male partner, what was the main reason for not using it? (ONLY ONE ANSWER; do not read out answers!)

1. A condom was not available at that moment (neither me nor my partner had a condom)
2. My partner has no infections (it is safe; I trust my partner)
3. My partner and I are both positive; both negative (serosorting)
4. I don't like sex with condoms
5. My partner did not want to use a condom
6. I don't use condoms because they create problems with my erection
7. Other (explain): _____

PAID MALE SEX PARTNERS

Now I am going to ask you some questions about paid male partners (someone you paid for them to have anal sex with you).

44. Did you have any paid male partners with whom you had anal sex in the past one year?

1. Yes
2. No

!	If the answer was NO, skip to **PAYING MALE SEX PARTNERS**

45. Was lubricant used the last time you had anal sex with a paid male partner?

1. Yes
2. No

46. Was a condom used the last time you had anal sex with a paid male partner (regardless of whether you were active or passive partner)?

1. Yes
2. No

!	If the answer was YES, skip to **PAYING MALE SEX PARTNERS**

47. If a condom was NOT used during your last anal intercourse with a male partner, what was the main reason for not using it? (ONLY ONE ANSWER; do not read out answers!)

1. A condom was not available at that moment (neither me nor my partner had a condom)
2. My partner has no infections (it is safe; I trust my partner)
3. My partner and I are both positive; both negative (serosorting)
4. I don't like sex with condoms
5. My partner did not want to use a condom
6. I don't use condoms because they create problems with my erection
7. Other (explain): _____

PAYING MALE SEX PARTNERS

Now I am going to ask you some questions about paying male partners (someone who you paid you for you to have anal sex with them).

48. Did you have any paying male partners with whom you had anal sex in the past one year?

1. Yes
2. No

!	If the answer was NO, skip to **QUESTION 52**

49. Was lubricant used the last time you had anal sex with a paid male partner?

1. Yes
2. No

50. Was a condom used the last time you had anal sex with a paid male partner (regardless of whether you were active or passive partner)?

1. Yes
2. No

!	If the answer was YES, skip to **QUESTION 52**

51. If a condom was NOT used during your last anal intercourse with a male partner, what was the main reason for not using it? (ONLY ONE ANSWER; do not read out answers!)

1. A condom was not available at that moment (neither me nor my partner had a condom)
2. My partner has no infections (it is safe; I trust my partner)
3. My partner and I are both positive; both negative (serosorting)
4. I don't like sex with condoms
5. My partner did not want to use a condom
6. I don't use condoms because they create problems with my erection

7. Other (explain): _____

52. With what type of partner did you have your most recent anal intercourse?

1. With regular partner (a man with whom you are in a relationship)
2. With casual partner (a man with whom you occasionally have or once had sex without being in a relationship)
3. With someone you paid for sex
4. With someone who paid you for sex

CONDOM AND LUBRICANT USE

Now, I will ask you some questions about condom use and lubricant use.

53. In the last 12 months, how often did you use a condom during anal intercourse?

1. Always (100%)
2. Most of the time (75%)
3. About every second time (50%)
4. Sometimes (25%)
5. Rarely (10%)
6. Never

!	If the answer was NEVER, skip to **QUESTION 56**

54. In the last six months, did you use a condom the last time you had anal intercourse with any male partner (GARPR)?

1. Yes
2. No

55. In the last 12 months, did you experience a condom breaking or coming off during anal sex (regardless of whether you were active or passive partner)?

1. Yes
2. No

56. In the last 12 months, how often have you used lubricants during anal sex with men?

1. Always (100%)
2. Most of the times (75%)
3. About every second time (50%)
4. Sometimes (25%)
5. Rarely (10%)
6. Never

!	If the answer was NEVER, skip to **SEX WITH FOREIGN MEN (NOT FROM KOSOVO)**

57. In the last 12 months, what kind of lubricant, other than saliva, did you use most often for anal intercourse? (Circle only one answer; do not read out answers!)

1. Did not use any lubricant during in the last 12 months
2. Vaseline
3. Regular body cream
4. Hand lotion
5. Cooking oil/butter
6. Water-based condom lubricant (Durex, distributed by NGO)
7. Other (write):_____

SEX WITH FOREIGN MEN

Now, I will ask you some questions about sex with men from other countries.

58. In the last 12 months, did you have anal with a foreigner, a person who is not from Kosova?

1. Yes
2. No

!	If the answer was NO, go to **MEETING MALE SEX PARTNERS**

59. In the last 12 months, did you always use a condom when having anal sex with a foreigner?

1. Yes
2. No
3. Don't know

60. Please tell us the country from which the most recent foreign man you had sex with came?

1. Don't know his country of origin
2. The name of the country (enter below):

MEETING MALE SEX PARTNERS

Now, I am going to ask you some questions about where you meet male sex partners

61. In the last 12 months, how did you find male sexual partners – most often? (Only one answer)

1. By myself
2. On Internet
3. Through friends
4. Not meeting male sex partners in last 12 months/in a steady relationship
5. Other (write): _____

62. In the last 12 months, how often did you go to commercial places that are frequented by men who have sex with men? This includes places such as bars, clubs, saunas etc.

1. Never
2. A few times
3. Once a month
4. A few times a month
5. About once a week or more

63. In the last 12 months, how often did you go to public places in Kosovo that are frequented by men who have sex with men? This includes places such as parks, abandoned buildings, and other.

1. Never
2. A few times
3. Once a month
4. A few times a month
5. About once a week or more

64. In the last 6 months, how often did you use Internet to search for male sexual partners?

1. Never
2. A few times
3. Once a month
4. A few times a month
5. About once a week or more

SEX WITH FEMALES

Now, I will ask you some questions about sex with females.

65. Have you ever had vaginal or anal sex with a female?

1. Yes
2. No

!	If the answer was NO, go to **DRUG AND ALCOHOL USE**

66. In the last 12 months, with how many females did you have vaginal or anal sex?

Note: Refused to answer = 888; Did not have sex with a female in the past 12 months = 777

!	If the answer was 777, go to **DRUG AND ALCOHOL USE**

67. The last time you had vaginal or anal sex with a female in the past 12 months, did you use a condom?

1. Yes
2. No

DRUG AND ALCOHOL USE

We would now like to ask you a few questions regarding the use of drugs and alcohol.

68. In the past 12 months, during an average week how often did you use the following substances immediately before sex?

	Never	Once a week	2 to 3 times a week	4 to 5 times a week	6 to 7 times a week
Alcohol (wine, beer, hard liquor)	1.	2.	3.	4.	5.
Cocaine or crack	1.	2.	3.	4.	5.
Amphetamine (ecstasy)	1.	2.	3.	4.	5.
Marijuana	1.	2.	3.	4.	5.
Amyl nitrate (“poppers”)	1.	2.	3.	4.	5.
Hallucinogenic drugs (LSD etc.)	1.	2.	3.	4.	5.
Diazepam	1.	2.	3.	4.	5.
Heroin	1.	2.	3.	4.	5.

Note: Circle one number in each row.

69. Did you inject drugs in the last 12 months?

1. Yes
2. No
3. Refused to answer

!	If the answer was NO or REFUSED TO ANSWER, skip to **SEXUAL HEALTH**

70. The last time you injected drugs, did you used sterile injecting equipment – a needle and syringe that no one has used before you?

1. Yes
2. No

71. In the last 12 months, were you given sterile needles and syringes (e.g. by an outreach worker, a peer educator or from a needle exchange programme)?

1. Yes
2. No

SEXUAL HEALTH

Now, I would now like to ask you a few questions regarding sexual health.

72. During the last 12 months, did you have one or more of the following? (Multiple answers are possible):

1. Genital discharge (yes/no)
2. Burning pain on urination (yes/no)
3. Genital ulcers/sores (yes/no)
4. Swellings in groin area (yes/no)
5. Ulcers/sores on the anus (yes/no)

!	If ALL answers are NO, skip to **question 74**

73. Did you ask for professional help because of the symptoms described in the previous question?

1. Yes, I called or visited a private doctor
2. Yes, I visited a public doctor
3. No, I did not ask for professional help
4. I treated myself (get treatment from the pharmacy)

74. Were you ever diagnosed with? (Multiple answers are possible)

1. Chlamydia
2. Gonorrhea
3. Human papiloma virus (HPV)
4. Syphilis
5. Genital herpes
6. Hepatitis C (HCV)
7. Hepatitis B (HBV)
8. Don't remember

75. Were you diagnosed with a sexually transmitted infection in the last 12 months?

1. Yes
2. No

HIV TESTING

Now, we will ask you a few questions about HIV testing

76. Is it possible to test for HIV anonymously and free of charge in Pristine?

1. Yes
2. No

77. Can you tell me the name of that place? _____

78. Have you ever tested for HIV?

1. Yes
2. No

!	If the answer was NO, go to **DISCRIMINATION AND VIOLENCE**

79. Have you tested for HIV in the last 12 months?

1. Yes
2. No

80. Did you receive the result of your most recent HIV test?

1. Yes
2. No

!	If the answer was NO, go to **DISCRIMINATION AND VIOLENCE**

81. What was the result of your most recent HIV test?

1. Positive
2. Negative
3. Refuse to answer

DISCRIMINATION AND VIOLENCE

Now, I will ask you some questions about your experience of discrimination and violence.

82. Have you ever been physically attacked because you have sex with men?

1. Yes, once
2. Yes, multiple times
3. No

83. Have you ever been exposed to ridicule, insults, threats, or any other kind of psychological abuse because you have sex with men?

1. Yes, once
2. Yes, multiple times
3. No

84. Have you ever been exposed to violence or abuse from the police because you have sex with men?

1. Yes, once
2. Yes, multiple times
3. No

85. Have you ever been to prison?

1. Yes, once
2. Yes, multiple times
3. No

86. Does someone in your family know that you have sex with men?

1. Yes
2. No

87. Does anyone of your close friends - who are not gay - know that you have sex with men?

1. Yes
2. No

88. Has someone ever forced you to have sex with him?

1. Yes
2. No

89. How many of your friends are also men who have sex with men?

1. All
2. Almost all
3. Around a half
4. A few
5. None

CONDOMS AND PREVENTION COVERAGE

90. Can you obtain condoms when you need them?

1. Yes
2. No
3. I do not use condoms

!	If the answer was YES, skip the next question and go to the question number **92**

91. If you can't get a condom every time you need it – what is the main reason? (Only one answer; do not read out answers!)

1. They are too expensive
2. Not available in shops
3. Shop/pharmacy is too far away
4. Shops/pharmacy are closed when I need condoms
5. Shy to buy condoms
6. Don't know where to buy them
7. Other (explain):_____

92. In the last 12 months, have you been given free condoms (e.g. through an outreach service, NGO, or sexual health clinic)?

1. Yes
2. No

93. When was the last time you heard or read something about HIV or safer sex?

1. In the last month
2. In the last year
3. More than a year ago
4. Never

POPULATION SIZE ESTIMATION

94. Did you receive an object from someone during July?

1. Yes
2. No
3. I don't know

!	If NO, go to **question 97**

95. Can you describe what the object was? **(INTERVIWER: IS THE RESPONDENT DESCRIBING THE OJECT?)**

1. Yes
2. No
3. I don't know

96. Was this the object you received? (Show the object)

1. Yes
2. No
3. I don't know

97. INTERVIEWER-DID THE RESPONDENT RECEIVE THE OBJECT?
    1. Yes
    2. No

98. Have you received any VCT services (Voluntary Counselling and Testing) from the CSGD between January 1, 2014 and June 30, 2014?
    1. Yes
    2. No

99. Have you received condoms and lubricants from the CSGD between January 1, 2014 and June 30, 2014?
    1. Yes
    2. No

100. Have you received peer education sessions from the CSGD between January 1, 2014 and June 30, 2014?
    1. Yes
    2. No

101. What do you think is the highest number of men18 years and above, living in Pristina who have sex with men? (please give your best guess)

_____

102. What do you think is the lowest number of men 18 years and above, living in Pristina who have sex with men? (please give your best guess) _____

103. What do you think is the most accurate number of men 18 years and above, living in Pristina who have sex with men? (please give your best guess)

_____

Thank you for your participation!

Questionnaire for PWID

RDS Coupon Number_____

Date _____/_____/2014 **Time of enrollment**_____

Completed by _____
(Initials of interviewer)

QUESTIONNAIRE-PWID BBSS 2014

DEMOGRAPHIC CHARACTERISTICS

First, I would like to ask you some questions regarding your life in general.

01. How old are you?

	years

02. Sex? (*do not read the answers)* **ONLY ONE ANSWER!**

1. Male
2. Female
3. Transgender

03. What is the **highest level** of education you completed? **ONLY ONE ANSWER!**

1. No formal education
2. Primary
3. Secondary
4. College/university

04. Currently, are you: **ONLY ONE ANSWER!**

1. Married
2. Divorced or widowed
3. In a steady relationship
4. Single

05. Where did you live most of the time during the last three months? (*do not read the answers*) **ONLY ONE ANSWER!**

1. In your own house or apartment *(house or apartment of your spouse or partner*)
2. In a rented house or apartment *(house or apartment of your spouse or partner*)
3. In your parents' house or apartment
4. In someone else's house or apartment *(of your relatives, friends)*
5. No permanent location *(e.g., street, park, abandoned building)*
6. Prison
7. Somewhere else (where?) _____

06. What was the main source of your income during the last month? **ONLY ONE ANSWER!**

1. No income in the last month
2. Permanent employment
3. Temporary job/part-time job
4. Family support
5. Selling drugs
6. Stealing and/or begging
7. Something else (what?) _____

07. How many people who speak Albanian and have injected drugs at least once in the last month do you know by name or nickname (and they know you by name or nickname)? **(Cannot be zero)** _____

08. How many of them live in Prishtina and are 18 years and above? **(Number must be the same or smaller than response in question 07, cannot be zero)** _____

09. How many of them have you seen during the last three months? **(Number must be the same or smaller than response in question 07, cannot be zero)** _____

10. What is the main reason why you accepted the coupon and came here today? (*Do not read the answers!* ***ONLY ONE ANSWER***)
    1. Incentive
    2. HIV test results
    3. Syphilis test results
    4. Hepatitis C test results
    5. Hepatitis B test results
    6. All test results
    7. Because a friend/acquaintance/relative asked me to do it
    8. Had nothing better to do
    9. Thought the study sounded interesting
    10. Something else (state what): _____

DRUG USE

Now, I would like to ask you some questions about drug use.

11. How old were you the first time you injected drugs? _____ years

12. How frequently did you inject drugs during the last month? **ONLY ONE ANSWER!**
    1. Once
    2. 2-3 times
    3. Once a week
    4. 2-3 times a week
    5. 4-6 times a week
    6. Once a day
    7. 2-3 times a day
    8. 4 or more times a day

13. How many times did you inject yesterday?
(ENTER "0" IF PARTICIPANTS DID NOT INJECT DRUGS) _____ time(s)

14. During the last month, where did you inject drugs? **(MULTIPLE ANSWERS ARE POSSIBLE)**
    1. At my home
    2. In a private house or apartment
    3. In a public place, e.g. a bar, shop, toilet
    4. In a dealer's house or apartment
    5. On the street or in the park
    6. In a shooting gallery or in another place where PWID gather
    7. In a prison
    8. Someplace else (where?) _____
    9. No answer

15. How many people who were there who were also injecting drugs with you (or around you) the last time you injected? _____ people
(ENTER "0" IF PARTICIPANTS DID NOT INJECT DRUGS)

Now, I will ask you a few questions about drugs that you have injected so far.
16. Which drugs have you injected, ever? **(MULTIPLE ANSWERS ARE POSSIBLE)**

DRUG		**YES (x)**
1	Heroin	
2	Cocaine	
3	Heroin and cocaine together	
4	Amphetamine	
5	Morphine	
6	Opium	
7	Methadone	
8	Diazepam (Benzodiazepine)	
9		

17. Which drug did you use **most often in the last month**? **ONLY ONE ANSWER!**

DRUG		**YES (x)**
1	Heroin	
2	Cocaine	
3	Heroin and cocaine together	
4	Amphetamine	
5	Morphine	
6	Opium	
7	Methadone	

8	Diazepam (Benzodiazepine)	
9		

18. Have you ever overdosed to the point of losing consciousness?
1. Yes
2. No
3. Don't remember

19. Have you ever been treated in a medical center for overdosing?
1. Yes
2. No
3. Don't remember

20. From how many different people have you used previously used _____ (**"0" if nobody)** needles and/or syringes to inject yourself during **the last month**?

!	If the answer was zero, "0" (from **no one**), skip the following questions and go to question **number 22**

21. Who were the people who already used needle and/or syringe you have used for injection during the last month? (**MULTIPLE ANSWERS ARE POSSIBLE**)
1. Unknown person(s)
2. Friend(s) or acquaintance(s)
3. My sexual partner
4. Family member or a relative
5. Dealer
6. Other (who?).....

<u>During the last month, have you:</u>

22. Injected drugs by using a syringe in which somebody else has put a drug from his/her syringe?
1. Yes
2. No

23. Used a filter or cotton wool which somebody else had previously aspirated using their own needle/syringe?
1. Yes
2. No

24. Aspirated your drug solution into the syringe from the dish for mixing/cooking (a spoon or a glass container) from which somebody else previously aspirated?
    1. Yes
    2. No

25. Used the same water somebody else had previously used for washing or rinsing the syringes?
    1. Yes
    2. No

26. The last time you injected drugs, did someone else use the needle and/or syringe that you already used (you shared your needle/syringe with SOMEONE ELSE)?
    1. Yes
    2. No

! If the answer was**"0"(zero),** skip the following question and go to question **number 29**.

27. During the last month, how many people used the needle and/or syringe that you used before them? _____ ("0" if nobody)

28. Who were the persons to whom you gave your used needle and/or syringe (the one you have already used for injecting yourself) in the last month? **(MULTIPLE ANSWERS ARE POSSIBLE)**
    1. Unknown person(s)
    2. Friend(s) or acquaintance(s)
    3. My sexual partner
    4. Family member or a relative
    5. Dealer
    6. Other (who?).....

29. The last time you injected drugs, did you try in any way to clean/disinfect the needle/syringe you used?
    1. Yes
    2. No

! If the answer was NO skip the following question and go to **question number 31**

30. How did you try to clean the needle/syringe? **(DO NOT READ ANSWERS; MULTIPLE ANSWERS ARE POSSIBLE)**

1. With cold water
2. With warm water
3. With hot water
4. With boiling water
5. With soap or detergent
6. With bleach
7. With alcohol
8. Other (HOW?)_____

31. During the past month, how did you usually clean already used needle/syringe? (**DO NOT READ ANSWERS; ONLY ONE ANSWER IS POSSIBLE HERE!)**

1. I do not usually clean my injecting equipment
2. With cold water
3. With warm water
4. With hot water
5. With boiling water from a pot
6. With soap or detergent
7. With bleach
8. With alcohol
9. Other (how?)_____

32. The last time you injected drugs, did you use a sterile needle and syringe (GARPR)?

1. Yes
2. No

33. In the last month, how often did you use sterile needles and syringes to inject drugs?

1. Always (100%)
2. Most of the time (75%)
3. About every second time (50%)
4. Sometimes (25%)
5. Rarely (about 10%)
6. Never or almost never

34. Where did you obtain clean (new and unused) needles/syringes during the last month? **(MULTIPLE ANSWERS ARE POSSIBLE)**

	Yes (x)

1	Pharmacy	
2	On the street (from drug dealer or users, friends, etc.)	
3	Hospital/clinic	
4	Harm reduction place (NGO, outreach, etc.)	
5	Shooting site	

35. Have you used LABYRINTH services during the last year?
1. Yes
2. No
3. Do not know what Labyrinth is

36. Have you ever received treatment that could help you reduce or quit using drugs?
1. Yes
2. No

!	If NO, go to **section EXPERIENCE WITH POLICE AND PRISON**

37. How old were you <u>the last time</u> you went for the treatment **(ASK ABOUT THE MOST RECENT TREATMENT IF PARTICIPANT REPORTED MULTIPLE TREATMENTS)**? _____years old

38. What kind of treatment did you receive the last time you went for treatment?
1. Rehabilitation program run by an NGO
2. Rehabilitation program in a medical treatment facility
3. Rehabilitation treatment in prison
4. Detox treatment by my family
5. Self-help (tried by my own)
6. Other (describe)_____

EXPERIENCE WITH THE POLICE AND PRISON

Now, I would like to ask you about your experience with the police.

39. Have you ever been arrested for drug use?
    1. Yes
    2. No

!	If NO, go to **question 41**

40. Have you been arrested for drug use during the period January 1, 2014 to June 30, 2014? (PSE question)
    1. Yes
    2. No

41. Have you ever been to prison?
    1. Yes
    2. No

!	If NO, go to **section on SEXUAL PRACTICES**

42. Did you inject drugs during your prison time?
    1. Yes
    2. No
    3. No answer

SEXUAL PRACTICES

Now, I would like to ask you some questions about your sexual behavior.

43. Have you ever had sexual intercourse (Vaginal or anal sex)?
    1. Yes
    2. No
    3. Refuses to answer

!	If NO, go to **the next section (SEXUALLY TRANSMITTED INFECTIONS AND HIV TESTING)**

44. How old were you when you had your first sexual intercourse (Vaginal or anal sex)? _____years

45. Have you had sexual intercourse during the past month?
    1. Yes
    2. No

!	If NO, go to **the next section (SEXUALLY TRANSMITTED INFECTIONS AND HIV TESTING)**

46. With how many different people you had sexual intercourse during the past month? _____ people (**"0" if nobody)**

47. In the last month, did you use condom the last time you had sexual intercourse (GARPR)?
    1. Yes
    2. No

48. During the last month, did you use condoms each time you had sex?
    1. Always (100%)
    2. Most of the time (75%)
    3. Every second time (50%)
    4. Sometimes (25%)
    5. Rarely (10%)
    6. Never or almost never

49. In the last month, did you have sexual intercourse with a partner who injects drugs?
    1. Yes
    2. No

!	If NO, skip the next question and go to **the question 51**

50. Did you use a condom the last time you had sex with a partner who injected drugs?
    1. Yes
    2. No

51. Have you ever had anal sex?
    1. Yes
    2. No

!	If NO, skip to **the next section (EXCHANGING SEX FOR MONEY OR GOODS)**.

52. The last time you had anal sex, did you use a condom?
    1. Yes
    2. No

53. Have you ever had anal sex with a man?
    1. Yes
    2. No

Exchanging sex for money or goods

Now, I would like to ask you some questions about exchanging sex for money or goods

54. Have you ever received money, goods or drugs in exchange for sexual intercourse?
    1. Yes
    2. No

!	If NO, go to **question number 57**.

55. During the last year, did you have sexual intercourse with somebody who paid you with cash, goods or drugs?
    1. Yes
    2. No

!	If NO, go to **question number 57**.

56. Did you use a condom the last time you had sexual intercourse with somebody who paid you with cash, goods or drugs?
    1. Yes
    2. No
    3. Don't remember

57. Have you ever given someone money, goods or drug in exchange for sexual intercourse?
    1. Yes
    2. No

!	If NO, go to **the next section (SEXUALLY TRANSMITTED INFECTIONS AND HIV TESTING)**

58. During last year, did you have sexual intercourse with someone you paid with cash, goods or drugs?
1. Yes
2. No

59. Did you use a condom the last time you had sexual intercourse with someone you paid with cash, goods or drugs?
1. Yes
2. No
3. Don't remember

SEXUALLY TRANSMITTED INFECTIONS AND HIV TESTING

Now, I will ask you some questions about getting condoms, infections you get from sexual intercourse and about HIV testing.

60. During the last year, did you get free condoms from some non-governmental organization or outreach program?
1. Yes
2. No

61. During the last year, have you been diagnosed (a doctor told you that you are infected...) with a sexually transmitted disease, a disease you can get from sexual intercourse?
1. Yes
2. No

!	If NO, go to **question 63**

62. Were you treated for that infection (did you take medicine, etc.)?
3. Yes
4. No

63. Do you know where you can get a free and anonymous test for HIV if you want to?
1. Yes
2. No

!	If NO, go to **question 65**

64. Please name the place: _____

65. Have you ever tested for HIV?
    1. Yes
    2. No

!	If NO, go to **the next section (HIV KNOWLEDGE)**

66. Have you been tested for HIV in the last 12 months (GARPR)?
    1. Yes
    2. No

!	If NO, go to **the next section (HIV KNOWLEDGE)**

67. Have you learned the result of your last HIV test? (*Don't tell me!*)
    1. Yes
    2. No

68. What was the result of your most recent test?
    1. Positive
    2. Negative
    3. Refuses to answer

HIV KNOWLEDGE

Now, I will ask you a few questions about transmission of HIV.

69. Can having sex only with one and faithful uninfected partner reduce the risk of HIV transmission?
    1. Yes
    2. No
    3. I don't know

70. Can one reduce the risk of becoming infected with HIV by a proper use of condoms during each sexual intercourse?
    1. Yes
    2. No
    3. I don't know

71. Can HIV be transmitted by using a needle and/or syringe already used by somebody else?
    1. Yes
    2. No
    3. I don't know

72. Can a healthy-looking person be infected with HIV?
    1. Yes
    2. No
    3. I don't know

73. Can a person get HIV by using the same toilet with a person infected with HIV?
    1. Yes
    2. No
    3. I don't know

74. Can a person get HIV by sharing a meal with someone who is infected?
    1. Yes
    2. No
    3. I don't know

75. Talking about risks of HIV, how much do you think you are exposed to the risk of becoming infected with HIV?
    1. I am not exposed to risk
    2. The risk is small
    3. The risk is moderate
    4. The risk is substantial

Population Size Estimation

76. Did you receive an object from someone during the week of _____?
    1. Yes
    2. No
    3. I don't know

!	If NO, go to **question 79**

77. Can you describe what the object was? **(INTERVIWER: IS THE RESPONDENT DESCRIBING THE OJECT?)**
    1. Yes
    2. No
    3. I don't know

78. Was this the object you received? (Show the object)
    1. Yes
    2. No
    3. I don't know

79. INTERVIEWER-DID THE RESPONDENT RECEIVE THE OBJECT?
    1. Yes
    2. No
    3. No, but he/she used to inject

80. Have you received any services from the psychiatric clinic between January 1, 2014 and June 30, 2014?
    1. Yes
    2. No

81. Have you received any services from the Family Medicine Center between January 1, 2014 and June 30, 2014?

82. Have you received outreach services (in the shooting sites) from Labyrinth between January 1, 2014 and June 30, 2014?
83. Have you received VCT services (Voluntary Counselling and Testing) from Labyrinth between January 1, 2014 and June 30, 2014?

84. Have you received needle and syringe exchange services from Labyrinth between January 1, 2014 and June 30, 2014?

85. What do you think is <u>the highest</u> number of people 18 and above, that live in Prishtina that inject illicit drugs? (please give your best guess) _____

86. What do you think is <u>the lowest</u> number of people 18 and above, that live in Prishtina that inject illicit drugs? (please give your best guess) _____

87. What do you think is <u>the best accurate</u> number of people 18 and above, that live in Prishtina that inject illicit drugs? (please give your best guess) _____

Thank you very much for your time and participation!